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PORFIRIO DIAZ,
PRESIDENT OF MEXICO.

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MEXICO, for so many years the theatre of strifes, political and sectional, of cabals, disorders and revolutions, appears to have settled down to a condition of comparative harmony, her people are cultivating the arts of peace, and, as a resultant, the world is learning again of those magnificent resources stored among her majestic mountains that, centuries ago, inflamed the cupidity of Spanish adventurers. We hear of new enterprises now and then inaugurated in one or another part of that semi-tropical country for the development of its mines or vegetable productions or the extension of its commercial relations with the world. Railways are being built, new towns settled, and other intimations of rapid growth encourage the lover of his kind in thinking that the land of the Montezumas is rising toward that place among the nations that should be hers.

To speak of Mexico is to suggest the name of the man who has been progress in endeavor to promote her welfare. Parfirio Diaz properly claims a large share of the credit of converting a faction or a guerilla-divided state into a peaceful community. Skillful as a military leader he won success for his cause and party, and then at once set about organizing a body politic that should combine the better features of the old contending parties or factions, and represent the people or their better interests. Previously Mexico had been a republic in name. Diaz sought to make it a real entity and worthy of the respect of the neighboring governments. Success in arms, however attained, will always command the admiration of the average man, because the average man is drawn to the consideration of physical achievements, especially those involving competition or contest.

The people of Mexico were prompt to accord respect to Diaz as an able general and to second his attempt to found a stable government on the ruins of the older erratic and unhealthy systems. They elected him president by a good majority, and the wisdom of his administration has thus far shown itself in the practical effects already outlined.

The student of physiognomy has little difficulty in detecting evidences of a foreign heritage in the face of President Diaz, for Spanish elements declare themselves in outline and feature, whether those elements be of immediate derivation or transmitted through generations of colonial parentage, pure or mingled with other blood. The swarthy hue of skin, the black eyes, the compact bony framework and excellent vital capacity belong to a long-lived, enduring class; to a people whose environment inspired activity of muscle and brain, and associated in every-day employments the mental faculties with hands and feet. A strong, tenacious organization then lies at the foundation of Senor Diaz mentality, and provides ample support for those dominant perceptive faculties and the full side organs. He is a natural mechanic—prompt to see the fitness or unfitness of surrounding relations, and as prompt in expedients and suggestions for the solution of difficulties. He is a keen analyst; few men have power to understand details as he can understand them and to carry them so clearly and definitely in recollection. The central region of his forehead appears to be unusually developed, giving him capacity for quick and intensive observation, and so enabling him in a brief space of time to take in a large amount of information. Had he been a newspaper reporter he would have obtained reputation for the facility with which he could store his mind with details, a sweeping glance on occasion being sufficient to furnish material for a descriptive article.

The eye shows language enough to express his thoughts in clear terms, and if necessary he can be fluent and per-

suasive. With so strong a temperament, so elevated a head at the crown and so broad in the lower third, President Diaz should be markedly energetic, positive, advanced and courageous in opinion and action. The head appears to be broad at Conscientiousness and Approbativeness, and this development should render him considerate of others and desirous of earning their substantial esteem. He is organized for control and leadership; in practical lines the qualities of the brave, determined soldier are wrought into the tissue of his character. He can be severe, doubtless, in his methods, but we think it is the severity of the disciplinarian and leader whose motives relate to attaining success for the benefit of a large aggregate, or a public, that might be impaired or prejudiced by an easy tolerance of wrong-doing on the part of a few. The character of the people and the nature of the life in Mexico during his youth and most of his life must be taken into account for a fair estimate of the man.

Noting the fullness of the head just above the cheek-bone and in front of the ear, it may be added that the good physical tone of the body, as evidenced by rounded contour of chin and cheek, has its analogies in the marked Alimentiveness. From this it is to be inferred that the President of Mexico is blessed with a good appetite, and his digestive functions are naturally efficient.

OLD METHOD OF TRANPORTATION IN MEXICO.

The following brief outline of his life will furnish other evidences of the character of the man that may be deemed more determinate by many perhaps than a reading of an acceptable portrait:

Porfirio Diaz was born at Oaxaco, Mexico, September 15, 1830, and con-

sequently is now sixty-two years of age. His life has been spent in the midst of the most exciting and changing political events. He was studying law when the United States invaded Mexico in 1847, but abandoned it to enter the National Guards. He joined the insurrection against Santa Anna in 1854, and was one of the leading spirits in revolts against the various governments which tried to rule Mexico until his own election as president in 1876. His ability and bravery led to his appointment as general in 1861. Much of the four years of his first term as president, commencing in 1876, was spent in the suppression of revolts. At its close, deeming his re-election unlikely, he secured the election of his secretary of war, Gen. Gonzalez, and then took charge of one of the departments. He was also appointed Chief Justice of the Supreme Court, but did not act. In 1875 he had adopted and proclaimed the plan of Tuxtepec, a very liberal political system, but made little or no attempt to carry it out, and when reprimanded for this apparent inconsistency by friends is credited with the reply that the "proclamation of Tuxtepec was nothing else but a heap of moral absurdities and material impossibilities, and that in consequence he was not able to fulfill the promises there made to the nation."

He was re-elected to the presidency in 1884, again in 1888, and for a fourth term at the recent election in 1892. It is generally admitted that his administration has, on the whole, been a successful one, for, among its results, peace has been established at home, trade has been increased, the resources of the country have been developed, railroads and telegraphs extended and education advanced. As we have already intimated, for the first time in generations the Mexican people have shown a disposition to act in practical harmony, and set to work with the spirit of earnestness to build a nation that will invite the respect of the civilized world. If this attitude be in a great measure the work of Diaz he is entitled to receive credit for it, and whatever may be the comments of observers on his career as soldier, insurgent, politician and executive officer, the later excellent consequences of his policy should impart to his motives a favorable and even patriotic color.

Our Southwestern readers may be somewhat familiar with the Mexican people, but the majority of those who have access to the PHRENOLOGICAL have had but little opportunity to learn much about the great country across the Rio Grande. Its abundant natural resources in everything that contributes to a nation's wealth, and its wonderful remains of an ancient civilization render it peculiarly interesting to the scientific and curious. Our illustrations show some features of the life and scenery; the ruins of the old Aztec temples must attract attention by their suggestions of the grand in the taste and capabilities of a race long passed away—capabilities in architecture, indeed, that challenge competition in the modern Mexican.

Lately there have been symptoms of a revival of the old revolutionary spirit in certain quarters of Mexico, especially on the United States line. Some uneasy fellows, tiring of the continuance of the Diaz regime, are trying to displace it and to introduce a condition for their own personal advantage that would, if successful, be but a repetition of the old ephemeral programs, involving the nation again in disorder and disaster.

CAN WE AFFORD IT?

CAN we afford to brood over our injuries? We should not think of putting our favorite rose bush down cellar. We should not expect it to bear roses in that dark, chill atmosphere. The exquisite miracle of blossoming

is worked by sunshine, pure air, and the right soil for the needs of the plant. How do we go to work to produce joy, which is the blossom of the soul? This rare flower may be cultivated; but it requires that the will be turned in the right direction. To hold a grudge is to shut out the sun. To be justly angry, and by a storm of vehement words to express that righteous wrath, may clear the atmosphere. But let us do our cursing frankly and be done with it. Let us keep the fountain sweet. There is a vast, rich, mental realm allied to our mentality. There is a vast, rich, spiritual realm allied to our spirituality. To us of right belongs their wealth. Is it not worth while to find out and practice the proper means for coming into its possession?

The heir to an estate will take immense pains to prove his rights. He will spend years in hunting up documentary evidence. He will mortgage what property he possesses to pay his lawyers. He counts time, health, strength as nothing in comparison with the money he hopes to win. And yet the wealth when gained may hold for him no real value. It may only hinder him in ideal living. It is the rarest thing in the world for wealth to be spent in furthering noble aims.

The tendency to lower the standards of character; to yield to self more than its due; or, rather, to allow the lower self an undue ascendency is naturally very great; it is vastly strengthened by the power of money.

Yet this very hazard is ardently coveted, striven for, bought at all costs.

Who toils and endures for the ascendency of character? Who serves long years for the privileges of human nobility? Who mortgages his home that he may clear his way to the radiant sphere of joy?

Let it be granted that we perceive the right meaning of the word happiness. We understand that it means harmony, balance, soul-health; that it comes not by the possession of certain things, but by attaining to a certain condition. We mean to strive for this condition. It is happiness, by the way, that all men and women seek, but they mistake the path to its attainment. We have learned, let us say, that in order to produce the music of life we must be harmonized. We have an intelligent idea of what we are working for. Then the very first step is to kick off past trials, injuries, grievances, like an outworn garment, nay a filthy garment that hinders and clogs at every step.

"I cannot forgive that injury," says one.

Very well, then, take the consequences of impaired spiritual vitality. Or, comparing the soul to an instrument, allow a discord in all your life music. There is no way to rise into full, free, vital relations with the sources that make our life except by "forgetting the things that are behind." We hope all tested the truth of this over and over again in our experience. If not, let every one test it for himself. To come down to the commonest level of life—if you are doing hard physical work, your arm is weakened, your hand made unskillful to a degree, by sour, dissatisfied, hating thoughts; you are nerved with double strength by pleasant, loving thoughts. Where does the strength come from? Whence comes the strength of the oak that stands against a thousand storms? That is a question we need not try to answer only in so far as we answer it by saying that it comes through harmonious relations with its environment. But the point is, we want that strength. We want the power, the music that comes through loving. We wish to avoid the weakness, the discord, that is produced by hating.

There was never yet a precept formulated by prophet or seer that had not its roots in law. We are much readier to obey a law when we see its sequences in actual life. If, in some sacred book,

men who had never seen a harvest were commanded to sow seed, they might not bestir themselves to obey. But prove to their sight and taste the value of the commandment, show them that the law of the harvest is seed-sowing, and they go about it in the most business-like manner. So let the world once believe in the practical value of loving, and it will begin cultivating love with the enthusiasm of the gold-digger or the pearl-diver.

To come back to the question with which I began. Can we afford to disregard that law of our natures which allies us most nearly to our Master and Leader? It is in the strict fulfilment of this law of love that we find our true strength. Let us do what we will, we shall do all in a narrow, inefficient fashion so long as we are held back by belittling thoughts and feelings.

MARY F. BUTTS.

REV. DR. EDWARD McGLYNN.

THIS is a very superior organization as regards both body and brain. Nearly all the elements necessary to produce harmony of temperament are well represented. The symmetrical frame, closely-woven fiber, and dark brown hair indicate strength, while the blue-grey eyes, the compressed lips, and a certain negativity in the middle third of the face bespeak a delicacy and refinement which no doubt are inherited from the mother. However, the nutritive system and brain predominate, as shown by the capacious torso and head, the latter measuring 23¼ inches in circumference.

From a natal, and possibly also an ecclesiastical point of view, Dr. McGlynn is an American. But to the phrenological eye, he is essentially an Irishman. Still, his head is not of the dolichocephalic, or long, narrow type which, knowing his ancestry, we would expect to find, except within a limited arc near the ears. Indeed, the occiput, or back head, is as short as that of the typical German. Hence the constant presence of particular persons, or continued residence in one place, will not be necessary to his happiness. At the same time, he has such mellowness of manner and so much responsiveness and sympathy, that he will probably impress his friends as exceptionally strong in the adhesive faculty. But it is to principles rather than to persons that he gives his heart. He loves people as a community rather than as individuals, and it is their fidelity to the cause he represents which binds him to them in the name of friendship. Besides, it should be remembered that from the nature of his duties, both sacred and secular, he is brought into a variety of intimate relations with people, and in this manner is made to appear capable of greater attachment than he really feels.

Having also but a moderate development of the cerebellum, he is not likely to find in a celibate life any occasion for disappointment or regret.

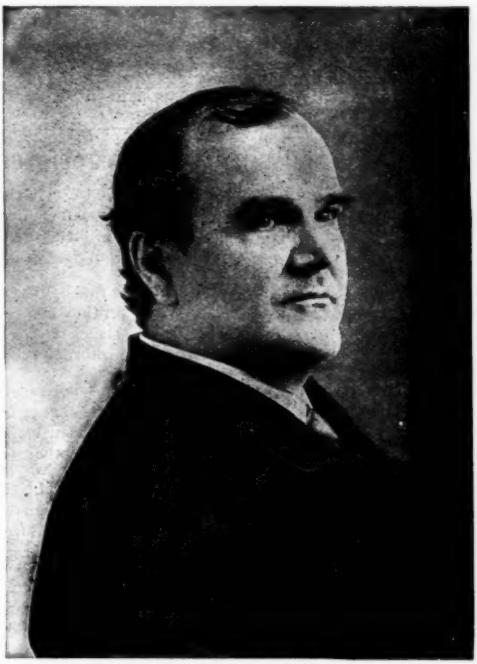
The lateral expansion of the forehead is likely to impress a casual observer with the idea that the whole head is broad—a mistake very frequently made when Ideality and Constructiveness are large. But a pressure of the hands just above the ears shows that the diameters in this region are comparatively insignificant. The cranial integuments are also lax here, and soft like a cushion, from which we may be certain that the qualities of severity, secrecy, sense of possession, and love of contention, are all very weak, and their abuses, such as malice, falsehood, avarice, and aggressive belligerency, well nigh inconceivable. He will manifest enthusiasm in the defence of his position, but his moral feelings supply the force.

He resembles Henry George in his almost utter lack of the hoarding in-

stinct, and it is easy to trace in a measure the economic theories of these two men to this peculiarity. Not that all individuals feebly endowed with the sense of property are certain to agree in their philosophical views. But it follows that if the propensity to accumulate is very weak, it will be much easier for the other mental powers to oppose monopolies, or favor a more general distribution of wealth, than in the opposite case. Acquisitiveness, when predominant, drives a close bargain, so to speak, with the other faculties, and often completely overpowers them. When the combination is reversed, and the moral sentiments are supreme, as in the case of certain religious orders, the opposite idea is evolved, and all claims to private ownership are renounced.

Dr. McGlynn would be glad, on many accounts, to escape from the turmoil and din of public life, for strife and antagonism are in themselves repugnant to him. But he will be unable to repress his higher emotions and the convictions associated with them, so that if they lead him into battle he will be willing to take a place in the front rank.

His head is very high and broad at Reverence and Faith, and in the most comprehensive sense of the term, he is religious. He is inclined to be obedient and loyal, but he is an idealist in religion as in philosophy. His intellect is of the subjective or introspective sort, which concerns itself but little with the facts and tangible machinery of the objective world. Hence he has more veneration for the spirit than the letter of his creed, and is more interested in his ministerial or sacra-



REV. DR. EDWARD MCGLYNN.

mental duties than in questions of ecclesiastical government.

The head slopes off at Firmness, Self-esteem and Continuity, but Conscientiousness, Cautiousness and Approbativeness are large. He is not pertinacious, self-willed, or obstinate, in the proper sense of these expressions, and he is still less influenced by any feeling of his own personal value or power as a factor in the world. On the contrary, he is naturally very diffident, and would probably be embarrassed before an audience if it were not for the abundant experience he has had in public speaking.

The finest development of all, however, is at Benevolence. This is so conspicuous in his frontal top head, that the most untrained eye can see it at a glance. Here we have the key to the man's whole character. Philanthropy is the dominant feeling, and, like a fragrant dew from heaven, it moistens, softens and enlivens every flower in the garden of his thought.

As to his intellectual methods, there is great capacity for abstract reasoning, as evinced by the breadth of the upper forehead. But he lacks precision and accuracy in observation. He sees the forest but not the trees; and if his attention is called to a tree, he notes the size of its shadow, but never counts the branches or the leaves. This is shown by the depressed glabella, or space between the eyebrows, and signifies weakness in the sense of objects. Hence he will not excel in physical science, and is liable to errors in reasoning, from the tendency to neglect apparently trivial but in reality important data. Language is only moderately developed, and his eloquence is chiefly the result of his temperament and emotional faculties. His great sympathy, imagination, imitation and wit, render him well adapted to almost any of the higher educational departments, but especially in religious and philanthropic work.

E. C. B.

THE COMMUNION OF HONESTY.—At one of his dinners, Sir Isaac Newton proposed to drink, not to the health of kings and princes, but to all honest persons, to whatever country they belonged. "We are all friends," he added, "because we unanimously aim at the only object worthy of man, which is the knowledge of truth. We are also of the same religion, because leading a simple life we conform ourselves to what is right, and we endeavor sincerely to give to the Supreme Being that worship which, according to our feeble lights, we are persuaded will please Him most.

UNLOVELY CHILDREN.

A mother stood beside the bed
  Where two small children lay—
They pretty looked, though both were dead,
  Like children tired of play.

"I doubt me much," she softly said,
  "Wherever they can go;
For Mattie struck Tom on the head—
  And Tom returned the blow."

And anywhere—no Angel feather
  Would stand a chance to lie,
In pretty rows all nice together
  If Mattie passed them nigh.

She'd hold an Angel by the wing
  And pull the feathers out,
And Tom's loud voice would harshly ring
  And make an Angel-rout.

I do not see their heaven range—
  Yet they to me were sweet,
And it seems now so cold and strange,
  The silence of their feet.

If they had been but good and mild
  I had been more content;
And questioned less about the child—
  And where the bad ones went.

Oh! mother, in the Father's house,
  Fair mansions ready stand:
That, which could thy poor love arouse,
  Was God's dear silver band,

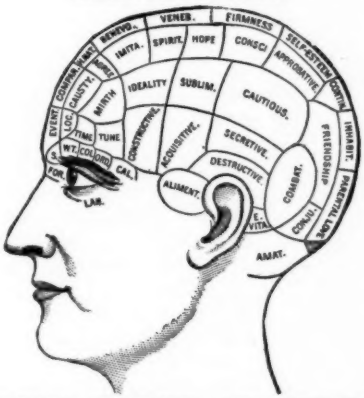
That draws the weak and trying ones
  As by baptismal fire,
Up, where they catch the Angel tones,
And lovingly aspire.

ELIZABETH OAKES SMITH.

PRACTICAL PHRENOLOGY.

[CONDUCTED BY PROF. NELSON SIZER.]

PHRENOLOGICAL HEAD.



HUMAN PURSUITS, AND HOW TO STUDY THEM PHRENOLOGICALLY.

SECOND.—THE RAILROAD LAWYER.

In this field of practice the lawyer need especially large Perceptives, because there is involved in matters pertaining to railroad construction and operation a mass of detail which requires recognition, not enmasse, but in detail. It is a large business, hence a man needs comprehensive reasoning power and especially Comparison to enable him to adjudicate conditions, to appreciate differences and shades of differences between the rule and its execution—orders and their fulfillment on the part of the servants of the road. It requires also a first rate development of the organs of Eventuality and Locality—the first to remember historical facts, the second to give him an idea of direction and distance.

He should also be endowed with a good development of the faculty of Constructiveness so as to understand whatever pertains to the mechanical conditions, development and construction of roads, and all that pertains to switches, turn-tables, draw-bridges, etc. If I were to select a boy that was to be educated for a railroad lawyer I would get one that would make a good engineer so he could understand anything about a railroad. I heard the great Daniel Webster make a speech in Boston in 1848 on a railroad car-wheel patent case, and I know the attorneys and clients had instructed him with models or illustrations in regard to the action of a car-wheel in the process of cooling after casting. After he had been so instructed that a boy twelve years of age might have understood it, Mr. Webster stood up and explained it so poorly and made such a mess of it that the jury understood it better than he did, and smilingly nudged each other in the side while he was talking. Mr. Webster had a powerful intellect, but his Constructiveness was comparatively small. If a son of mine fifteen years of age, with half the instruction Mr. Webster had had in this case, had made such an explanation of it I would have been ashamed of him. If the case had hung on Mr. Webster's statement on that point, the client would have lost it, but the jury knew better about it than Mr. Webster did.

A railroad lawyer ought to have also good financial capabilities, because large and intricate financial conditions are involved in questions which they have to consider. A man with good financial ability will manage a claim for injuries and get twice as much damages for his client where they are properly due as one would who had a small development of Acquisitiveness.

While I would give a lawyer in any

field Benevolence and Friendship and Agreeableness strongly marked, it might at first thought seem that a railroad lawyer should have more sternness than blandness, but we think a man will succeed better in dealing ith human nature to have in character a friendly, kindly spirit. A man who comes into the corut house like a hedge hog bristling with quills, growling and snarling at everything that is said to him, is calculated to incur the dislike of every person in the court house from the man who opens and

CHAUNCEY M. DEPEW,
PRESIDENT N. Y. CENTRAL RAILROAD.

shuts the door to the judge on the bench. I have known some lawyers who were apparently always mellow and pliable as if they wanted to oblige everybody, and when they were compelled to dissent would do it in a kind of tender and regretful manner, and it has a wonderfully favorable influence on the jury to see a man act as if he wanted to be fair and just, and as if he were inclined to give every just phase of the subject a welcome. The lawyer from Springfield, Ill., who has been quoted in reference to Lincoln, said a case was being tried in which Lincoln was counsel on one side, and the lawyer on the other side was trying to get a witness to answer a question, and the court objected to it because he thought the other side would object, and Lincoln sat there apparently paying no attention while the judge and opposing attorney were squabbling over it, and directly Lincoln looked around and said, "Your honor, I reckon it would be fair to let that in." The judge said, "All right; if you are willing I have no objection."

I would make the railroad lawyer a gentleman in his demeanor; it would serve to make life and litigation smoother. The railroad lawyer should have large Firmness and Self-esteem so that he can stand in the presence of well-paid, able and eager opponents and not feel small or act as if he felt small. I have seen a lawyer stand in the presence of legal and judicial learning and the eager strife of the subject, and when he got a chance to speak he would say that he regretted that his learned brother on the other side had become a little warmer on the subject than was really necessary. It reminds me of the familiar old school-book fable in which the blustering wind thought to strip a man of his cloak by force, but the harder the wind blew the tighter the man pulled his cloak about him. The sun tried to dismantle the man in a different way; he tried by pouring his calm and steady rays on the man's back, and soon caused him to take off and abandon his cloak.

THIRD.—REAL ESTATE LAWYER.

A real estate lawyer needs large Comparison, and he should have a good memory and good practical sense; it does not require much cunning, but the person should have a good development of Caution and Secretiveness, and especially large Continuity so as to give him the patience and perseverance to trace titles back perhaps a hundred or two hundred years and follow it through all

the phases of transfer and redemption of tax titles and whatever might be a cloud on the estate. In handling real estate nothing is to be taken for granted. Sometimes an estate is lost by some little technicality, by failing to have the papers verified before the proper authority; perhaps the notary did not belong to that county, and when that is the case, if the notary is not certified by the clerk of the court of his county and attached to the document, it invalidates the whole work. The real estate lawyer should have a good memory to hold the laws that belong to his own state; he ought also to have the ability to hold knowledge of the statutes of other states. Of course, if the real estate lawyer is an eloquent speaker it is all the better, but he can secure respect and success without it.

The late Samuel J. Tilden was a railroad lawyer and a corporation lawyer, and he made more money than almost any lawyer in the country in handling these massive financial cases. He was not an eloquent speaker; he was diminutive in altitude, not attractive in appearance, but he had a cool, clear head in regard to mechanical and financial matters that belonged to the railroad business. When Mr. Tilden died he had made a bequest in his will to New York for a library, but his will was so defective that it has been seriously modified by litigation. It is sometimes said that a doctor who treats himself has a fool for a patient, and in more cases than one it has been proved that a lawyer could not manage a case for himself one half as well as he could manage a case for another. A physician who

SAMUEL J. TILDEN.

has a wife or a child alarmingly ill generally confides the case to a man who has no particular interest in the person, lest his sympathy should warp his judgment or pervert his understanding. Chancelor Kent, the great authority on surrogate law in this country, made his own will and it was broken in court as if it had been made of pipe clay.

FOURTH.—CORPORATION LAWYER.

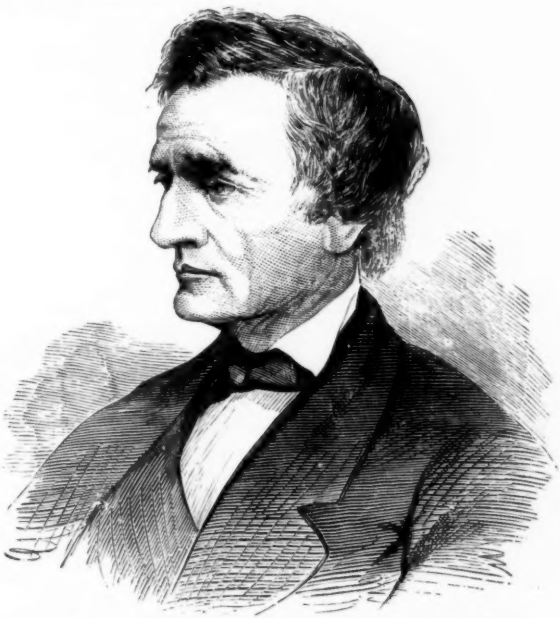
These need a cool, strong temperament with more of business capabilities than eloquence; it requires a legislative as well as a judicial mind. Corporations are based upon a special law or enactment in its case unless it comes under the general law. A legislator needs to have a clear sense of the force of an enactment which he is constructing. A corporation lawyer needs to see and follow that which has been enacted, and to appreciate its application to the case in point. He should be good in figures and accounts and should have a good commercial education. Some lawyers are expert in bank matters—in the examination of work of banks and corporations. They will take a set of books and find out if they have been correctly kept. In this state there is a bank expert, perhaps more than one, that stands high, and is called on by stockholders to examine their affairs. The dishonest officer of the company, who has been fraudulently using the funds of the concern, takes the hint and skips out to safer quarters when the expert is expected to come around.

FIFTH.—PLEADERS, ADVOCATES, BARRISTERS.

The function of this phase of law is to take a case which solicitors or attorneys have quarried out and prepared for trial. In this form of law a man needs the literary faculties; he needs perception and a good development of the semi-perceptive organs. He needs large Language to express his thoughts in a clear and easy manner, and if he had a good development of Ideality to enable him to embelish his thoughts elegantly it would be all the better. He should have a Vital Mental Temperament so as to bring a glowing enthusiasm to the work in hand. He should also have a good memory of historical facts, which would enable him to state the case as if he had been there and seen it all. Daniel Webster had a way (if it were in regard to some lighter matter it might be called a trick) of handling a case before a jury in such a way as to make it seem in an eminent degree noble and fair. He would state a case before a jury as he thought his opponent would naturally state it, and would bring forth some of what were considered the strongest points of his opponent, and he would begin the argument as if he were on the other side, and occasionally he had his coat pulled by his anxious client and told that he was on the wrong side. When he had stated his opponent's side of the question pretty strongly and frankly he would say, "Now, gentlemen of the jury, that is the other side of the case as we understand it; if you will listen to me for a few moments, I will endeavor to present our side of the case," and he would march through his line of argument like an army with flying banners, and the case he had previously stated would look so slim by the side of his masterful argument that he would thus compel a verdict.

I remember two lawyers in Hartford, Conn., who were generally employed on most of the important cases. One was a clear-headed, straight forward man without eloquence or any tendency to make an effort in that direction, but he was a solid thinker and a clear-headed jurist, and when he arose to address the jury he would lean over the table and point his long, bony finger at the jury and in a confidential way tell them all about it, and it was made so perfectly plain to the jury that it

was very difficult to dislodge what he had said. He was one of the lawyers that generally had a chance to get the right side of cases. The other lawyer was a tall, handsome, jolly, funny kind of a man; his name was Charles Chapman and he generally had a full house when he was expected to speak. When Mr. Hungerford began his speech the crowd would leave the court house; everything there would be still and quiet, and for this reason what he said laugh, and he would try to ridicule and make fun of the opposite side and of Mr. Hungerford's speech. Chapman wore a white vest, and his bushy and abundant hair was brushed back and gave him a somewhat distinguished look, and he wore a large black ribbon as a watch guard, purposely spread out over his white vest, and taking it all, he made an imposing appearance. But Hungerford generally got the verdict.



WILLIAM M. EVARTS, THE EMINENT ADVOCATE.

in his solemn, frank, honest, earnest way was impressed all the more readily upon the jury. The crowd would leave a sentinel at the window to give the signal when Mr. Hungerford had finished his presentation of the case and it was Charlie Chapman's turn to speak, and they would come rushing into the court house like sheep. Chapman would talk to the whole house, and would tell funny stories and anecdotes and have everybody in the house in a

SIXTH.—ADVISERS OR COUNSELORS.

These need large mental comprehension and experience to judge of the merits of the case; they need a cool and balanced temperament, also Caution to make them prudent. A counselor or advisor should have large Conscientiousness and should aim to get at the truth and the bottom facts in the matter. There are a good many cases settled out of court, and if one of these advisers or counselors of the right kind

gets hold of a case he will charge pretty good fees for advising and promoting a settlement, but it will be better for the community and perhaps much better for his client that the case should be settled out of court.

SEVENTH.—LAWYERS WHO DRAW LEGAL PAPERS.

These men need good scholarly talent; their minds should be well disciplined and they should have legal training and culture and literary criticism. A man who has the requisite talent and culture and is engaged in this line of the law, will draw papers that flow smoothly and cover all the points involved, and he will draw them in such a way that they will not seem offensive. Some lawyers draw papers in such a way that they bristle with indignant earnestness as if one or both of the parties were swindlers and needed a barbed wire fence on both sides of the path. It would be a good mode of practice in the instruction of law students to give out the frame of a contract and let a dozen law students see how much each one could modify it in the smoothness of its statements without losing any of its power or force. We think it would be a matter of interest and advantage to a business man who has not been trained in the law to get counsel of some clear-headed legal adviser in reference to drawing business contracts, especially if he expects to have occasion to draw any for himself. This would doubtless save a good many litigations in the business world.

A friend of mine thought he would draw his own will. He had some literary capability and training and he said in his will, "I give and bequeath my house and lot," and when he had completed the document he went to his lawyer, who was a personal friend, and submitted the paper to him for approval. The first thing the lawyer said was, "You must *devise* your real estate; 'giving and bequeathing' will convey personal property but will not convey real estate in this state." That paid for the consultation fee.

EIGHTH.—PATENT LAW WORK.

In this line of work the lawyer needs to be admirably endowed with all the mechanical faculties to start with. In addition to that he needs literary capability, such as is required in the man who draws legal papers, because that is a part of the patent law business, but the core and backbone of his business is the mechanical capability. Some thirty years ago a patent solicitor desired rooms in our establishment, and in this way we learned a good deal about the patent business. We remember a case where a man had invented a printing press. He was not very well versed in the field he was trying to cultivate, and he brought to our office his plans and model of the press he wanted to get a patent on. He wanted to get a claim allowed for an inclined plane as a method of making the pressure in printing. The patent solicitor told him that mode of pressure in printing was in vogue in Dr. Franklin's time and that he could not patent it, and if he could patent it it would be of no use as the "elbow joint," which had taken its place, was much the best. However, the lawyer showed him something about his press that could be patented, and he got that patented and in about six months he sold his patent for $5,000. In this case the solicitor knew more about mechanical construction and more about the history of the printing press than the inventor did. Of course a man who is a solicitor in this position ought to have a good substantial character. The temperament of the patent lawyer should be a calm one; he should have perhaps a predominance of the Vital Temperament with a little touch of the Lymphatic. He ought also to have a good share of the Motive Temperament to make him energetic, strong and persistent. He ought also to be moral, upright and just, as well as prudent and self-respecting.

THE HEAD AND FACE

AND WHAT THEY INDICATE

By NELSON SIZER.

CHAPTER II.

THE BRAIN, ITS STRUCTURE AND USES.

THE brain is the master or the central source of power, motion and talent; in other words, knowledge and power. Every fibre of the body is under the masterful control of the brain and its appendages, the nerves. Every quivering sensibility in the entire structure is a messenger to carry to

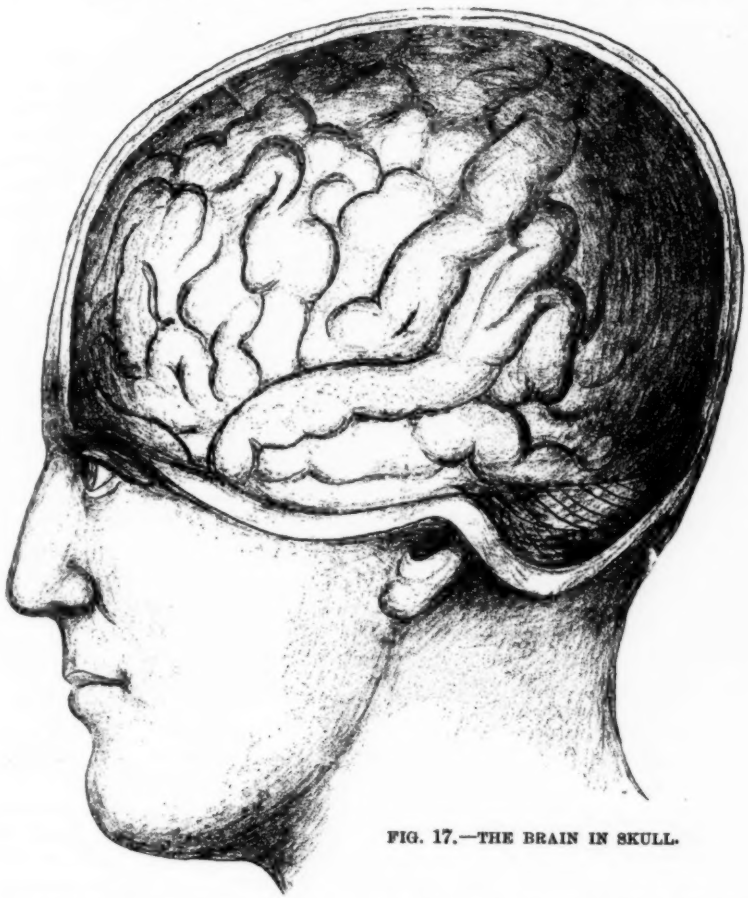


FIG. 17.—THE BRAIN IN SKULL.

the brain a knowledge of joy, sorrow, secured from the outer world; and every effort of the will in the work and struggle of life receives its impulse in the brain and serves the purpose of that brain in the work and duty of life. The nerves of sensation which give pleasure and pain are so spread in minute fibres throughout the system that we can not touch with a point of a needle any part of the system without touching one of them; so that the brain, though located in the cranium, has its agencies all over the system; and the nerves of motion, actuated by the brain, produce all the force, skill and power which is manifested in life.

There is more known about brain and nerve to-day than there was half a century ago. When I commenced to lecture men who knew enough to go successfully into the avenues of skill and industry would sometimes ask, touching the forehead, if the brain was located there for they had seen some person who had received a blow on the forehead and the brain was exposed. Another would contradict it and say that he had known a person to receive a blow on the back of the head and the brain was then exposed. Another had seen a person injured on the side of the head in the region of the ears and the brain was seen to be there. And I would say to them, "Gentlemen, you are all right, the skull is completely filled with the brain from the orbits of the eyes to the back of the neck, even as an egg-shell is filled with its contents; and the skull is simply the house the brain lives in and is made to protect it, not to imprison it."

In earlier times physiologists studied everything more than the brain, and common people have, therefore, less information on that subject than on most other topics relating to the human economy. We now seek to present in a simple form for popular reading and understanding facts relating to the brain that ought to be known by all, avoiding most of those sharp technicalities familiar to the student of medicine; and we will try to make the general outline of brain development and its characteristics plain to the popular mind.

BRAIN AS SITUATED IN THE SKULL.

Fig. 17. In this engraving is represented the head and face with one-half of the skull removed and the brain exposed as it exists in life. If a line be drawn from the angle of the eye through the opening of the ear to the back head it will indicate the base of the cavity of the skull which in life is filled with brain. In this figure also will be seen the edge of the skull and the edge of the scalp. The cerebrum or great brain and also the cerebellum or little brain at the base, behind the ear, are shown.

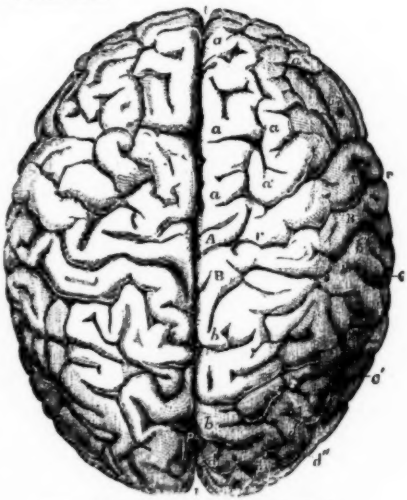


FIG. 18.—BRAIN HEMISPHERES. TOP VIEW.

Fig. 18 represents the cerebrum or great brain as it would appear if it were taken out of the skull and we looked upon its superior or upper surface. It will be seen that there is a deep line or cleft running through the whole length, completely dividing the mass into two

equal sections or hemispheres from top to bottom. These hemispheres are united by a white fibrous membrane in the central section called the corpus

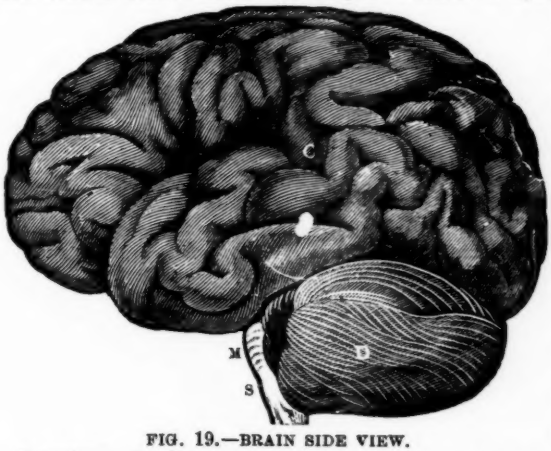


FIG. 19.—BRAIN SIDE VIEW.

C, cerebrum. D, cerebellum. M, medulla, oblongata. S, spinal cord, where it passes out of the skull.

callosum; and this connection brings the two hemispheres of the brain into connection and co-operation.

Fig. 19 is a side view of the brain which presents the left side of the cerebrum, C, and the left side of the cerebellum, D, or little brain. The medulla oblongata, M, and the spinal cord, S, which is a continuance of M, passes through an opening in the tentorium and out of the skull and proceeds to form the spinal cord, running through the whole length of the spinal column, this being sub-divided into infinitely small fibres which pervade every part of the body, giving sensation as well as motion.

There is another division recognized in discussing the brain, namely, lobes. Fig. 20 gives us the basilar aspect of the brain, the cerebrum and cerebellum when the whole mass is turned upside down. This is the bottom view of the brain. The anterior lobes of the brain (each hemisphere has its lobes) from AA to BB are regarded by phrenologists as the intellectual lobes in which the organs of the intellectual faculties are located. The cleft at the back margin of the anterior lobe at B is called the fissure of Sylvius which divides the front and middle lobes of the brain near BB. Between BB and CC are presented the middle lobes of the brain in which phrenologists locate the organs and the selfish propensities, such as Vitativeness, Alimentiveness, Combativeness, Destructiveness, Secretiveness, and Acquisitiveness. From CC to DD are the posterior lobes in which are located the social [or domestic organs. EE shows the hemispheres of the cerebellum or

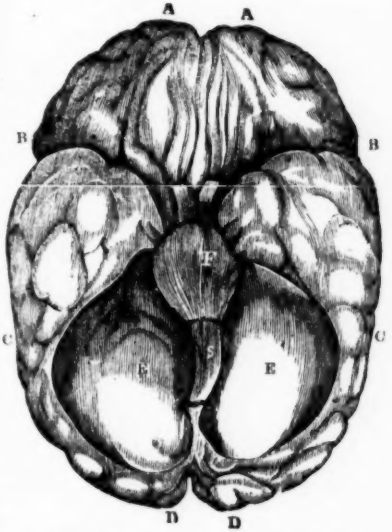


FIG. 20.—BRAIN, BOTTOM VIEW.

Anterior lobes from A, A to B, B. Middle lobes from B, B to C, C. Posterior lobes from C, C to D, D. Cerebellum, E, E. Medulla oblongata, F. Spinal cord, S, proceeding from the medulla oblongata, cut off below the skull, and laid on the cerebellum (see Brain, Side View). Fissure of Sylvius, dividing between the front and middle lobes of brain near B B.

little brain. F represent the medulla oblongata. S is the spinal cord attached to the oblongata. Thus the brain and the body through the spine have their connection and co-operation.

If we turn and look at Fig. 19 again, we will see where the fissure of Sylvius divides between the anterior and middle lobes.

Fig. 21 shows the base of the brain of a North American Indian, and the reader can not fail to observe and mark the difference between Fig. 20 and Fig. 21. How much shorter and relatively smaller the anterior lobes of the Indian brain are in Fig. 21, AA to BB, and how much larger the middle lobes of the brain are from BB to CC; and then how much broader the middle lobes of the brain are, rendering the head so much wider between the ears. This gives significance to the breadth of the head of Fig. 9, page 22, and the narrowing of Fig. 10. The middle lobe of the brain in Fig. 9 is broad, the character is severe, executive, positive and plucky. Fig. 10 shows a narrow head; it may have intelligence and morality but it lacks pluck, push and power. The Indian is not intellectual, his knowledge is narrow and meagre, and relates to physical things, but his physique and the elements of severity and cunning, in fact all the animal propensities are enormously developed, as seen in Fig. 21. It is the case in all the crania of all the war-like tribes of Indians no matter where they dwell. They are the elements that make the tiger, lion and wolf, and all the carnivora in short, fierce and intense in their severity. They are the characteristics of the wild man whose animal propensities have been chiefly developed.

If we take an Indian child and culture him in the gentle amenities and sympathies of refined civilization, it will prevent the great growth of the middle lobe of the brain, and his children, if the mother were removed from savage life and trained in a similar way, would have an inheritance in which the middle lobe of the brain would be lessened and the anterior or intellectual lobe would be enlarged; so in the successive generations the shape of the head of the Indian would be transformed.

In civilized life where children wrangle and struggle for existence and are largely savage in habit and impulse, they will be found to have round heads, broad heads, they will be cruel and cunning. A few generations of refinement and culture would change the form of the cranium as well as the disposition of the individuals.

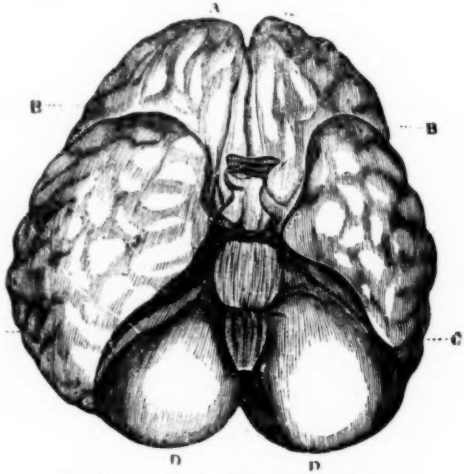


FIG. 21.—NORTH AMERICAN INDIAN.

Fig. 22. This shows the left hemisphere of the brain, and the wall that is presented above the white band, called the corpus callosum, represents the cleft between the two lobes which runs clear through in front of that arched band and behind it. This corpus callosum is a bundle of fibres which unites the two hemispheres of the brain, bringing them into connection and co-operation. In this engraving also is shown the cerebellum, which in this

case has been sliced off so as to show what is called the arbor vitæ, or tree of life. Here the gray matter and white matter are differently disposed from what they are in the cerebrum. (See Fig. 23).

substance, like the peel of an orange. It is also called cineritious, meaning ash colored or gray. The gray matter is regarded as the special agent of mentality, and the deeper the foldings the greater the talent in the fortunate

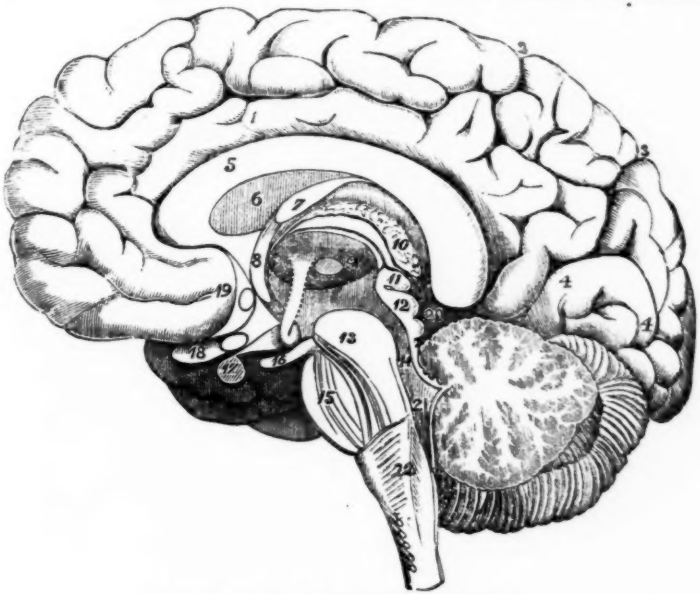


FIG. 22.—LEFT HEMISPHERE OF BRAIN.

5. Corpus callosum. 9. Optic thalamus. 11. Pineal gland. 12. Corpora quadrigemina. 13. Crus cerebri. 15. Pons varolii. 22. Medulla oblongata.

Fig. 23. This figure represents a section of the brain including both hemispheres sliced off to a level with the corpus callosum, and the white substance of that structure will be seen connecting the two hemispheres. The Medullary or the white substance of the brain is here exposed in a large way and is surrounded by the convoluted margin of gray substance.

There is another anatomical marking besides the divisions of the brain into hemispheres and lobes, namely, into convolusions, or the deep foldings of the surface. The surface of the brain is composed of gray matter, and its outer covering is called the cortical

possessor. Within this cortical substance is the white, fibrous tissue of the brain which is called medullary matter. It is of a grayish white, and is developed from the medulla oblongata in radial fibres toward the surface where the fibres unite with the cortical substance; and the length of these fibres from the brain centre to the circumference indicate the development or magnitude of the brain.

In Fig. 1 to 4, the lines running from the opening of the ear forward, upward and backward; and the back views of the same head in Figs. 5 to 8, with similar radial lines show the method of forming a large brain by the exten-

sion of these fibres; hence the Webster brain is broad, long and high; and the other heads represented, down to the idiot's, have shorter fibres and the heads are smaller; just as a small wagon wheel has short spokes and a large wheel has long spokes. So that in measuring heads and studying their formation, the phrenologist looks for the distance from the medulla oblongata or capital of the spinal cord to the surface of the brain. He does not look for hills and hollows, for little inequalities of surface. The Webster head has as smooth lines as any of the other heads contained within its outline. There are no more bumps on Webster's head than on the idiot's head, but there is more distance from the opening of the ear, more massiveness, more power.

The reader now will understand why Fig. 20 differs from Fig. 21 in character. One, Fig. 20 has a modified middle lobe of the brain, the propensities and passions are restricted. In the Indian, Fig. 21, the character is developed through the middle lobe, the talents are not developed in his case through the anterior lobes very much. Another look at Figs. 9 and 10 will reimpress this thought.

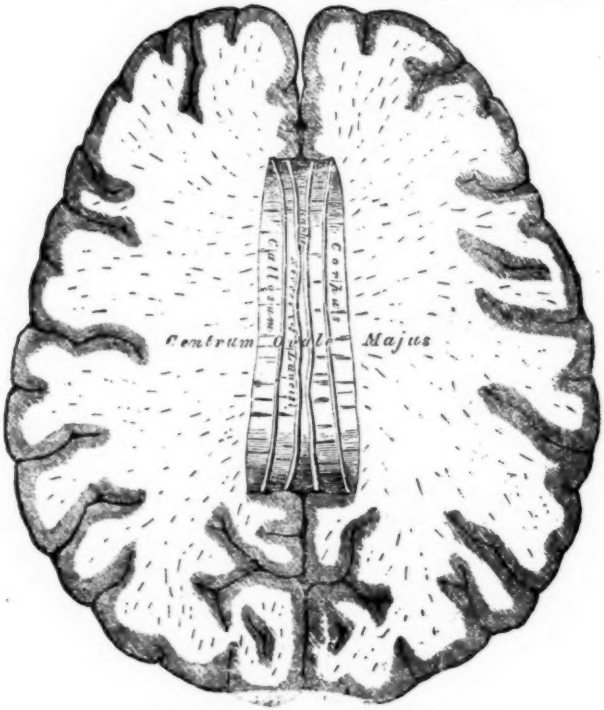


FIG. 23.—BRAIN, TRANSVERSE SECTION.

Section of brain on a level with the Corpus Callosum, showing white fibres, convolutions and gray matter.

Fig. 9 is a man to build engines and run them, to quarry granite, to be a man of the executive sort, while Fig. 10, with the narrow head, could keep the books, could do the intellectual part of the business and keep everything straight in the counting room.

THE BRAIN IS FIBROUS.

The question of the fibrous structure

of the brain was somewhat slow in finding a lodgment in the anatomical and medical world. Gall and Spurzheim were opposed in Germany and in Paris because they claimed that the brain was of a fibrous structure, but they demonstrated it by dissection of the brain, and the microscope in its modern improvement has sanctioned their word.

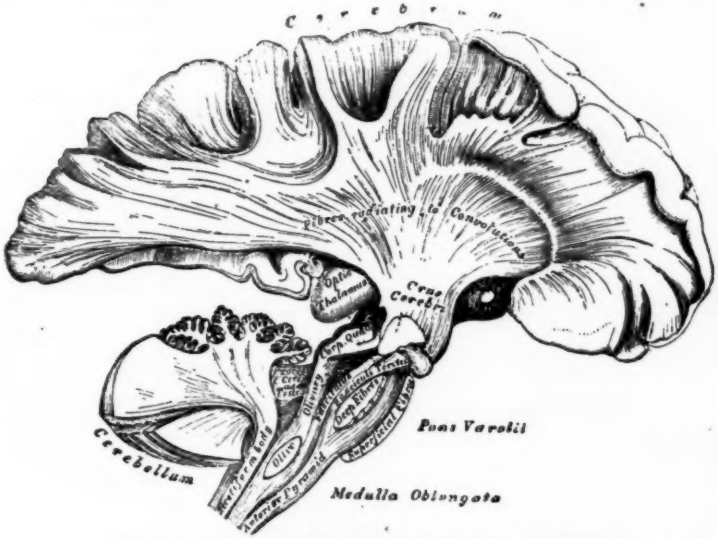


FIG. 24.—FIBRES RUDIATING TO THE CONVOLUTIONS

As late as 1842, in a public lecture in Vermont, I stated that phrenologists did not estimate the mental organs, as most people persist in claiming they do, by bumps, but by radial distance from the medulla oblongata to the surface of the brain where the organs are located; that the brain is developed from that point by means of fibres toward the brain surface like the ribs of a palm leaf fan.

At this point, a young lawyer of the village who was the professor of medical jurisprudence in a small medical college in that State, rose and asked permission to address the audience for a minute. Permission being granted, he said, "My friends, with all due respect to our young friend, the lecturer, I desire to say—and having had, as you know, some acquaintance with a subject relating to the brain and to the brain itself, I am prepared to assert—there are no fibres in the brain as there are none in a bowl of custard; it can be cut with a spoon as a custard can be. The phrenologist's theory of fibres must therefore be erroneous." That man was no slouch, he afterward, I think, became Chief Justice of the State, but whether he learned anything more about brain fibres, I am not informed.

I replied that "Dr. Gall, the founder of phrenology, was a German physician, and in Germany physicians are supposed to be well educated; and he had such a standing that he was called to be physician to the Emperor of Austria, in that city of scientific learning, Vienna; and among learned men in Germany he stood high, and he taught that the brain was fibrous, as I stated it.

Dr. Spurzheim, associate of Dr. Gall, was also an educated German physician, and the two men in their lectures de-

livered in Paris, taught the fibrous structure of the brain, and the people of that learned metropolis were convinced by their demonstrations. They were the men who taught the doctrine which I merely repeat here."

Of course this Vermont lawyer represented the state of medical science on this subject where he taught jurisprudence; and he thought he was doing his neighbors a justice to disabuse them, and himself a justice in taking advantage of the opportunity to say that he knew something that the people among which he lived did not know.

Five years previous to this, however, a professor of physiology, at Washington, who was opposed to phrenology, delivered lectures which were published, in which he plainly recognized and stated the fibrous theory of the brain. Within ten years of the time when the Vermont lawyer disputed this doctrine, the great work called Gray's Anatomy, was published in London, which is still, in 1893, the standard text book of anatomy in every English-speaking medical college in the world. It illustrates the point in question by an engraving which is represented in Fig. 24.

In the engraving which is here copied, the cerebellum has been permitted to fall away from the cerebrum. In life it lies snugly up under the cerebrum. (See Fig. 19.) It was permitted to fall away so that the parts above could be better shown for the anatomical student.

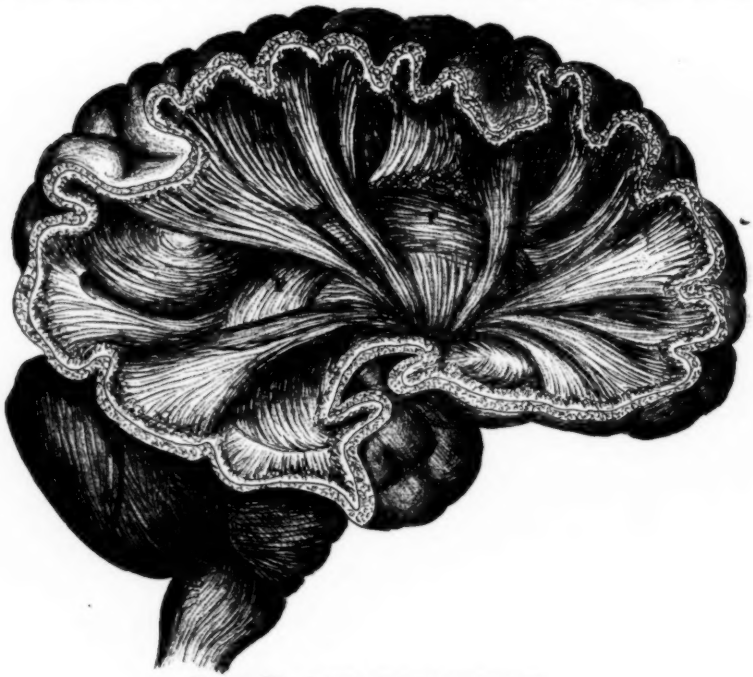


FIG. 25.—BRAIN FIBRES DISSECTED.

Toward the base of the cerebrum the reader will see what we choose to call a real arch, made of the words, "Fibres radiating to convolusions." We have sometimes wondered what the Vermont lawyer, the lecturer on medical juris-

prudence in a medical college, thought of this engraving the first time he saw it. Of course the medical college (to which he ministered in 1842) as soon, at least, as 1852, followed Gray and everybody else in teaching the fibrous structure of the brain. There are more fibres in the brain than there are in a bowl of custard. Yet many people still persist in talking of bumps, as if we looked for and followed them.

This engraving, fig. 24, is a section of the left hemisphere of the brain, showing the medullary or white, fibrous structure. The gray matter at the surface can be seen in certain parts, though the object of the engraving was not to show the cortical or gray matter of the brain, but the white fibres.

In Fig. 25, we have also a left hemisphere of the brain, and we are looking at that side of it which joins the right hemisphere. They are separated from each other by the falciform process of the dura mater; and in this engraving there can be plainly seen the strip of gray matter attached to the convolusions at the surface, then the bands and lines of white fibres run from below, upward and outward.

In the measurement and study of heads, as indicated and illustrated by Fig. 1 to 8, it will be understood that by drawing a line through the head at the opening of the ears, it passes through the centre of the brain at the medulla oblongata; hence we study from the opening of the ear, and know that the medulla oblongata is exactly between them; hence the organs in the side head give wideness to the head. The organs in the top head are large in proportion to the length of the fibre from the medulla oblongata. The organs in the front head are long and large in proportion to the distance from the opening of the ear forward to the external part of the head.

If one will take a palm leaf fan and hold it in his hand by the handle and see how the ribs run, to the right, to the left and upwards, he may have a rough idea of the sections of the brain, the handle representing the spinal cord and medulla oblongata.

Some heads are an inch and a half wider above the ears than others. Some heads are an inch and a half longer from front to rear. Some are long from the ears backward. Some are long from the ears forward and short behind. An apple is large because the distance from the core is great every way; and it does not need bumps anywhere to show that it is large.

Some heads are irregular in form (See brain, Fig. 21), it differs from Fig. 20, showing a difference in the length of the fibre lines in different parts of the head. Fig. 20 shows a harmonious balance between the frontal, the middle and the posterior lobes of the brain. Such a head is developed by civilization and the laws which regulate life and character. Fig. 21 is very broad in the middle lobes. In that region Phrenology locates the propensities, the passions, the elements of severity and force, policy, prudence and appetite, and when we compare that strong, selfish propensity department of the middle lobes of this brain with its anterior lobes from AA to BB, we see that the middle lobes are twice as large as the anterior lobes, whereas in Fig. 20 they are supposed to be normal and harmonious. The middle lobe in Fig. 20 gives power and executiveness, and the anterior lobe gives knowledge and power to think, reason and plan, so as to exercise power wisely and humanely. Fig. 21, the Indian, is severe, treacherous and selfish, his intellect is cramped and narrow and relates mainly to things practical and physical. He cannot reason except upon what he sees.

One person has a wide, short head; another has a large head in the base and low in the top. (See Fig. 12 contrasted with Fig. 11.)

Where the fibres are long the functions will be strong. Where the fibres are short the functions are weaker, temperament and quality being similar.

SKETCHES OF PHRENOLOGICAL BIOGRAPHY.

DR. GODMAN.—PROF. H. H. GIRD.

Some of the strongest evidences in proof of Phrenology are derived from comparative anatomy. It was, undoubtedly, facts from this source, more than from any other, that produced conviction in the mind of the celebrated Dr. Godman.

Dr. Sewall, in his eulogy on the character of Dr. Godman, said of him: "It was his accurate knowledge of anatomy and physiology, and his uncommon power of teaching these branches of medicine, which gave him his strongest claims to our regards as a man of science. He always came to his subject as an investigator of facts; the zeal with which he sought information from this source (original observation) may be learned from a single incident, that in investigating the habits of the shrew-mole, he walked many hundred miles." A few of Dr. Godman's own words will be of interest. In an address on natural history, at the close of some interesting remarks on the brain of the elephant, he says, "The remark has often been made that the brain of the elephant is very small compared with his huge bulk; this remark may have appeared to be of more consequence, while the brain was regarded as the *source* of the nerves, than it can do now it is well ascertained that the nerves communicate with, or terminate in, the brain, instead of being emanations therefrom. Perfection of intellect has nothing to do with size of brain compared with corporeal bulk, but depends upon the *proportions* existing between different parts of the brain itself, and, as a general rule, upon the acuteness of the organs of sense. Where the proportions of the brain are comparatively excellent, as in the elephant, seal, etc., more of *mind* is displayed, although not more than one sense be remarkably good, than in animals having all the senses more acute with a less perfect arrangement in the proportions of the anterior, middle and posterior parts of the brain. It is remarked among men, that small, *well-proportioned* heads display as a general rule, more of talent and energy than the majority of large heads, having less perfect proportions between the conformation of the anterior and posterior parts. The difference between the mind manifested by large and small heads, equally well proportioned, may be stated to consist in difference of activity; the large head being slower in operation, but capable of greater continuance of effort, while the small one is quicker and more energetic, but sooner exhausted by mental exertion." Dr, Godman also said, "It is safe to infer that the opponents of Gall and Spurzheim do not understand the exact nature of the case against which they dispute, at least, no man who ever set himself honestly to work to examine the subject fairly, has remained in opposition."

In 1839 there was a large and flourishing phrenological society at Jackson, La., where the college of that State was located. This society had been established for some years, and embraced the college president and professors. In 1838 Professor Gird delivered an address before this society, which was spoken of in high terms; its concluding paragraph follows: "For this trait, for its tendency to diffuse the noblest kind of knowledge, I am a *warm* friend to Phrenology. It shuts not itself in the scholar's cell, its sphere is not the narrow bounds of the professor's lecture room; it goes forth strongly in the consciousness of its truth and simplicity, and addresses itself to all who are willing to hear. It calls men together; it teaches them to study themselves and their fellow-men, to apply their knowledge to useful and benevolent purposes under the guidance of the Holy Spirit of Christianity. It is not extravagant, then, to apply to its authors and propagators the eulogium bestowed on Socrates. Like him, they have brought philosophy down from heaven, and caused her to dwell once more in the abodes of men."

CHARLOTTE F. WELLS.

CHILD CULTURE.

RESPONSIBILITY OF CHILDHOOD. No. II.

Many ways in which children are abused have been named, but there is one more that I should mention. Parents are so particular concerning their social standing that should any of their children in their weakness fall, they may be turned out of their homes. Especially are young girls so treated. Better by far should such parents pray for their own weak and inconsistent selves. Yet they may ask God to keep and protect their child after having abandoned it to the wiles of the world.

A child with the powers of Secretiveness, Firmness and Individuality conspicuous, may be expected to be more or less unruly. The moral organs being deficient, he will be disposed to lying, stealing, and other immoral actions; he will be sneaking, impudent, saucy, haughty and desiring to know and trying to find out mean, low and unbecoming things. A teacher can *explain* and set an *example* of what is correct, but never can he alone so far overcome these cerebral imperfections of the child as quite to eradicate this evil tendency. They are born in the organism, and form mental traits which may be improved but never entirely eradicated.

There remains another grand division of this subject to be discussed. There are two classes of persons who consider this subject from different standpoints. One class holds that all ideas are innate and come direct from God. The other claims that the mind is a blank at birth, and all knowledge is acquired, and that man has no inward desire, save as he learns.

A close study of minds shows that we are born with a special individuality, peculiar tastes and tendencies, but training and education will modify the native disposition more or less. In many children the aptitude for eating is very strong. They cry almost continually unless given nourishment; and when they become older we call them gluttonous if their disposition has not been properly corrected. Those with strong Friendship may be continually crying and sobbing unless in the arms of some one. When they are older, if the habit be not corrected, we call them pests, for always desiring to be on some one's lap. They make our sympathetic individuals, and take it very much to heart by disappointment in love. It is thus seen to be an established law of nature that different actions are performed by different organs, and that man has the tools, the mental powers, by which to do all things. One may have a good mechanical tool, Constructiveness, and by proper use of it be a blessing to mankind, but by improper use of it be a curse. It is by long and repeated action that organs come to produce results automatically, as it were. While man has within him certain powers or passions, yet the manifestations of these must depend to a great extent on his education and training.

Many persons will sit for hours, telling witch and ghost stories, which fill the minds of children with pictures hideous and frightful, while the little ones crouch in some corner and listen, as if the angel from the bottomless pit were in search of them. They afterward think of these things from time to time, and become such cowards that not unfrequently all the rewards in Christendom could not hire them to venture, after night, even where the most absolute assurance of safety was given.

In Appleton's second reader there is a selection concerning a child that desired

a sweet cake. When it was on its way to get the cake it heard a voice as it were, which seemed to say, "Don't do any thing naughty while I'm gone." Just what she had told dolly. She stopped and listened, "What could it be?" Her mamma, was not at home, and no one else was near. So she says, "It must be one of the angels that mamma tells me about." Is it not shameful to lead a child to believe in such things? That an angel would come down from heaven and tell a sweet, innocent little child—the only pure thing on earth—that is suffering from the pangs of hunger, it must not eat a sweet cake! but rather to leave it for some fine-haired visitor to gobble.

This is what I heard a minister say last summer during camp meeting when telling the children about Jonah in the whale: "Well, children, what do you suppose he did when he got out? Well, I suppose he ran home and got on some clean clothes." I thought if he had been in Jonah's place what a grand amount of ignorance or folly would have been swallowed.

The principles that we should teach our children are plain and simple. Inculcate an upright, moral character. Teach them their duties in all relations as far as positive knowledge will extend, and there cease. I am the friend of women and children, and if there is anything on this sphere clothed in human garb and visible to the eye that I can conceive it would be acceptable in the eyes of God for man to worship, it is a happy, peaceful and virtuous woman with her arms entwined about a sweet, dimpled and rosy child. If for protecting these sacred beings from vile teachings a man is to be called a "sap-skull," crank, an enemy to the church, etc., you could not brand me with a higher title. I am of the opinion of Henry Ward Beecher, when he said: "A man who has a *good* wife need ask but little more of God until death." For truly his earthly paradise is within his reach. All he needs is a realization of his treasure, and even the angels of heaven may envy him his portion.

FRASER.

A PLEA FOR THE CHILDREN.

IN these days we hear a good deal about children having "the right to be well born," and they certainly have; but they also have the right to be *well fed*. We are well aware that for a child to be well fed, comprises a good deal. Some, who consider their children well fed, if they should pay half as much attention to the subject as they do to the feeding of their blooded stock, would realize that they come far short of giving it the weighty consideration they should.

This article is dealing strictly with facts, and is not designed to be sensational. We have seen an infant, at six weeks old, fed pork and beans. We have also seen infants of a few months old fed regularly at the table with such food as the rest of the family ate, which consisted of many rich indigestible things. Then some wonder that so many infants die with cholera infantum when the greater wonder should be that so many survive that do. Many infants are not given water to drink, but instead tea and coffee; their unwise mothers contending they are not as liable to have colic.

We knew one mother who gave her son fifteen warm cookies while she was baking in the forenoon, and during the afternoon let him devour nearly a whole jelly-cake. When remonstrated with in regard to her son's eating so much rich food, she said: "I don't think he will live to be very old, and I do not wish to have it to think over after he is gone, that I denied him what he wanted to eat." Within three years the youth was dead. That the mother found consolation in having given all her boy desired, we have failed to learn.

At one time, being asked to care for

an infant while its mother attended the funeral of a relative, we were told: "It will not cry, for I have fed it some good whiskey sling." Yes, the poor little thing of four months old was *drunk!* The mother was a member of a Christian church and mingled in good society. These few incidents show not so much depravity as ignorance of the laws of health, and that good health is largely built up and retained through what we eat.

If a mother could know that she was fostering intemperance in her boy, and sowing the seeds of scrofula in her daughter's blood, through the food she gave them, we have not a doubt that she would strive to learn the best methods of preparing it. But some mothers are so wofully ignorant as to cling to the old time methods of preparing food, is a pity. If they should spend less time over the latest styles in dress, and more over the physical needs of their children, it would be wise. We claim that the mother holds largely within her hands the power of having her child honest, temperate and intellectual, through the care bestowed upon its stomach and body, and that the physical needs of the child lie at the base of moral and spiritual development.

That a better day is dawning is sure, through the heralding of this gospel of food. And it is wisdom for such to be indefatigable in their efforts, for in the promulgation of this doctrine lies the hope of a blessed future.

MRS. S. ROSALIE SILL.

EARLY MENTAL DEVELOPMENT.

BOTH common observation and the closest scientific study have made it plain that youth is the period of sense ascendency. From this most important conclusions follow, which we can not ignore without paying a heavy penalty. Attention has been called to the infant in order to show that, prior to all school education, Nature asserts herself, and points the way in which the human brain and mind develop. Any education that overlooks these facts is directly against the organization we possess, and must be more or less of a failure. How far our methods have been and are in harmony with them I shall presently attempt to show.

For the moment let me follow the child out of the stage of infancy into that of school age. The boy of five, let us suppose, is sent to school a perfect stranger to books and the usual educational equipment. Everything on the road to school attracts him to such an extent that likely enough he may arrive late. When at school the teacher may find him so restless that the question of keeping him in order so that he shall not disturb others is a matter of serious difficulty. So long as he can be kept in action things go well enough, but to keep this activity within conventional bounds is the problem.

Very often repressive measures that quite paralyze his nature are resorted to in order to adapt his organism to the environment, instead of the reverse being attempted. It is forgotten too often that if this young creature were not active, even restless, impulsive, inattentive—i. e., ever ready to secure some new impression—he could not develop after Nature's plan.—*Popular Science Monthly.*

HELEN.

A big hat,
And some tumbled curls,
That's the head of
The sweetest of girls.
A tucked frock
And an armful of posies,
Here is one of
Her favorite roses.
Two little shoes,
Without any heels,
In order to know
How the firm ground feels.
You want the picture,
I'm sure you do;
For you'd love Helen
And she'd love you!

SCIENCE AND CURE.

MANY suppose that hygienic medication or treatment is a substitute for the employment of drugs as curative agents. Others think this method of treatment is supplemental to the proper or scientific use of drugs. Still there are others who think that hygienic medication is only a better way and advise a resort to drugs when it can not be intelligently administered. These views indicate a misunderstanding or a want of knowledge of the fundamental principles of the hygienic system of the healing art. This system of medical practice not only presents a different method of Therapeutics but also a different theory of disease and the *modus operandi* of curative agencies and appliances.

The very first principles of the hygienic system are opposed to those of drug medication. The fundamental principles of these systems of medicine are antagonistic and incompatible. If drugs are not curative agents *per se* then can a true system of practice direct their employment in such capacity? If all remedial agents have normal or physiological relations to the vital organism, then drugs of every kind can not be classed as such agents. If in the relation between living and dead matter the living is active and the dead passive, then drugs do not act on the living system but are acted upon by the vital powers. If disease is vital action in relation to things abnormal—a remedial effort, a process of purification and reparation—then it should not be destroyed and subdued by agents having pathological and destructive relations to the living system, but should be regulated and directed by true remedial agents which have normal or physiological relations to the vital organism. If all healing power is inherent in the living system and all true remedial agents are materials and processes which harmonize with the laws of living beings and can be used and appropriated by said organism in restoring it to a normal condition, then drugs as curative agents are a misnomer and are not such in fact. Drugs have a sphere in the true healing art. They are destructive agents in their relations to living beings, and in this capacity they are useful the same as the surgeon's knife. They may also be useful as anæsthetics and antiseptics in surgical cases; but their relation to the vital organism is antivital and may be termed when so employed a necessary evil.

Can any one who conscientiously believes that the first principles of the hygienic system of medication are true in fact, advocate and administer drugs and poisons to the sick and dying? Are

the writings of that great and profound author and teacher, Dr. Trall, on health and disease to be smothered and covered up by the teachings of the old dogmas of drug medication? The truth is that the few hygienic physicians scattered here and there in this country are curing patients who have been drugged and doctored by the best drug physicians in the land without relief, and even were made worse by such medication, and also are teaching the true science of health as well as demonstrating by actual practice the true method of cure. The hygienic system of healing teaches not only a rational method of medication but promulgates the true principles of health reform and the science of health. The principles of curing as formulated by the late Dr. Trall are those founded in nature and science, and are, as the years go by, finding adherents and promoters. The recent epidemic of cholera in Europe reflects the light of hygienic medication. The most successful treatment of this dreaded disease proved to be in line with hygienic principles as set forth by this school of the healing art. It consisted of copious injections of warm salt water (probably better without the salt), into the large bowel, sponging the skin frequently with warm water, and good nourishing food, no drugs administered. A Dr. Lee, of Chicago, went all the way to St. Petersburg this last summer to test this treatment. He reported twenty-six persons treated in this manner and without a single fatal result. Some of his cases were in a state of collapse when treatment was begun and they were revived and made a good recovery. All real progress in medicine has been away from drugs and upon lines of prevention and hygienic therapeutics. The popularity of the Homeopathic practice is evidence in favor of the no-drug treatment of disease. If one must take drugs when sick or diseased then the less the better is the true theory or method to adopt. It is generally believed that the Homeopathic treatment is much more successful than the old large dosing method in children's diseases and all severe cases of illness. These tendencies of the public mind and thought go much towards establishing the truths and principles of hygienic medication and its hand-maid, the true science of health.

Within the past year I have observed and directed the treatment of two adult cases of chronic skin disease. One was eczema of the scalp which had existed since childhood, the other, eczema of the body of over fifteen years standing. Both of these cases had tried various plans of drug treatment without relief. The treatment I employed was mostly dietetic. This method rejected all condiments, even common salt and all fermented foods, such as yeast, baking powder, sour milk and soda breads, vinegar, etc.; and in their stead in the bread line unleavened wheat and corn meal bread was substituted. All table beverages, as tea, coffee, milk and even water at meals was prohibited. In the main all flesh foods were discontinued, and the diet consisted of grains, fruits, and vegetables; only occasionally beef roast or steak was indulged in. A true natural diet was adopted with the exceptions mentioned. Bathing was directed for purposes of cleanliness and not as a remedial agent. After six months of this pure food treatment, the skin eruption had disappeared and the skin was normal and healthy in both cases. They were both cured by this simple but efficient treatment. All the vital functions were invigorated and both of these persons have better health in every way than formerly, or before adopting this diet, which they still continue from choice. These cases demonstrate the curative value of a scientific diet, and is evidence in favor of the principles of the hygienic system of curing as being the true and rational method of medication.

J. G. STAIR, M. D.

THERAPEUTIC USES OF THE RECTAL INJECTION.

ARTICLE II.

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IT is altogether superfluous to remind the medical reader that for many years hydro-therapeutics in fevers, especially typhoid, have received the highest commendation in Germany and France, from hospital attendants, and also from leading American physicians. The cold bath of Brand, the free potations of Debove, the drinking and injection *per rectum* of cold water as advocated by Cantani, the observations of Dr. Baruch in a well-known New York hospital, may be said to be but revivals or extensions of the method of Priessnitz and his followers.

A Chicago physician, in a contribution to the *Medical Examiner*, speaks of some of the more common expressions of intestinal disorders, not febrile, that are the effect of functional inactivity, the waste products of digestion or indigestion being blocked up in the colon, in this vein: "Absorption of the feces from the colon leads to a great many different symptons; among others anaemia, with its sallow or yellow complexion, its chloasmic spots, furred tongue, foul breathing, and muddy sclerotics (membranes of the eyes). Such patients have digestive fermentations to torment them, resulting in flatulent distension, which encroaches on the cavity of the chest, which in excessive cases, may cause short and rapid breathing, irregular heart action, disturbed circulation in the brain with vertigo and headache. An over-distended cæcum, or sigmoid flexure, from pressure, may produce dropsy, numbness or cramps in the right or left lower extremity. A physical examination that will determine this impaction is simplicity itself. By placing the patient on his back, with the knees well drawn up, the physician can place one hand on the abdomen, below the tenth or eleventh cartilage, with the fingers of the other hand in the posterior hypochondriac region. The ascending or descending colon can easily be pressed forward against the hand in front of the abdomen. The hand in front should be kept firm and immovable. A little practice will enable one very readily to distinguish these accumulations. Conjoined manipulation enables one to decide the incontestible presence of impaction of the colon. Percussion sounds may be so obscured by adventitious circumstances as to render them valueless. Conjoined manipulation can be very quickly practiced, and is the most satisfactory method of examination. Its only uncertainty of detecting accumulations is in very obese patients. In them a flushing will dispel doubts."

A large percentage of that very dangerous disease known as typhlitis or appendicitis, is due to long retention of fecal matter in the ileo-cœcal pouch. Cases of abdominal distension have come under the observation of the writer, in which the pain and tenderness at the junction of ileum and colon were so marked that typhlitis was suspected. A thorough washing out however, with a long tube relieved the patient both of the pain and the possible experience of a dreaded operation.

H, a young man of 30, sent for me. He had been suffering for several months with abdominal pains, at times almost intolerable, had been treated by three or four physicians for indigestion, gastritis, colic, inflammation of the liver, enteritis, etc.; obscure pains invaded his chest, giving him an idea that he had heart trouble, etc. At the time I first saw him his abdomen was much distended and hard, and a slight but persistent diarrhœa gave much annoyance. For a day or two he had been having a succession of flushes and chills, which were rapidly exhausting

his strength, and intimated the probability of a septic complication. A careful manipulation satisfied me that the transverse colon was the seat of the trouble for the most part, it appearing to be closely packed with accumulations from right to left in spite of the powerful cathartics that he had been taking. At his request I proceeded to inject tepid water with a small proportion of borax into the colon. On account of the tenderness of the rectum it was necessary to proceed with great care, but I succeeded in introducing a soft rubber tube until about thirty-four inches had passed, and the patient felt it in the upper part of the left flexure of the colon.

Over four quarts of water were slowly injected at this first treatment, the patient bearing it well, and the relief it brought almost immediately converted his doubts regarding its expediency into grateful conviction that it was "the treatment" for his case. Repetition of this washing out administered several days in succession enabled him to sit up with comfort, to eat with some sense of appetite, stopped the diarrhœa, the fever and chills, and enabled him to sleep comfortably. Two weeks later he was out, and insisted that he was almost as well as ever.

A case worthy of reporting is that of Miss O., who had been having chills daily, a bad taste in the mouth, with vertigo, scalding urine, an eczema on the right hand and fingers. Examination revealed a loaded colon, although her bowels moved to some extent nearly every day. A daily flushing with the fountain syringe was ordered. In a week the chills ceased entirely, the vertigo had disappeared, the urine was improved. The flushings were continued for several weeks, and with her general improvement the eruption on the hand gradually disappeared.

Many of the reflex functional troubles that arise from bowel disorder disappear in the course of this treatment by the colon douche. Skin eruptions, as noted above, nervous disorders, even epileptic attacks, headaches, neuralgias, gout, rheumatism, dropsy, catarrh of the nose or throat, nervous fever, etc., are relieved, often as if by miracle.

It is for the physician to give the colon douche by the long tube in those cases where the seat of trouble can not be reached by the ordinary use of the hard rubber tip, because one not acquainted with the anatomy of the abdomen, and inexperienced might do very serious harm in his awkward attempt to push the tube in. For the method by the long tube a bulb syringe is necessary, but for ordinary home uses a good fountain syringe is best; force enough can be obtained for the introduction of the water by graduating the height at which the holder is held. But if the case is one of long standing, and the fecal impaction is very hard and involved deeply with the folds of the intestine, only a skillful hand may succeed at all, and it would be folly for the patient to permit any other to touch him. Dr. Monroe, of Louisville, who writes enthusiastically of the treatment, says with much aptitude of phrase: "Colons that are chronically impacted, lined with indurated fæcal matter are like an old stove when the ashes of many winters have formed clinkers in its sides that have to be chiseled off. These impacted colons present a small canal at the side or in the middle of the impaction through which the fæces must pass, and such patients always have to liquefy their stools by drugs every time they obtain an action."

It is not at all strange that people who have such a condition of the bowel complain of persistent constipation despite the aloes, rhubarb, cascara, magnesia, etc., they may daily swallow; the retained waste matter that plasters the sides of the intestine prevents any effective action of the mucous and muscular coats, and its state is one of comparative paralysis.

A tube with a soft rubber tip similar to that of a catheter is better than the hard rubber tip in case the patient has an irritable anus, or piles that give trouble. The treatment, I can say here, has a remedial effect upon these conditions, even where they have existed for years and defied other treatment.

To get the best effect, a person when taking the douche should lie in such a manner that the shoulders are lower than the hips. What is called the "genu-pectoral" position is well adapted to secure thoroughness; the patient places himself on his knees on a level surface, and bends down until the chest touches, or one can lie on the left side, a pillow being placed under the hips to elevate them. What is known to gynecologists as the Trendelberg position, is also well adapted to effective treatment. This, or an approximation of it, is more comfortable than the genu-pectoral posture, as the person lies on the back with the body inclined from the shoulders upward. If a couch with a flat surface be used the foot may be raised fifteen inches or so, to get the proper inclination. It is manifestly quite inconvenient for the patient to give himself the treatment if he would adopt this or the genu-pectoral attitude when receiving it. The better time for the treatment is when the stomach is empty, and not soon after eating, as then severe griping may prevent the completion of the douche.

I usually give a pint or so of water first, and let the patient, if unaccustomed to the procedure, use the commode or closet. This clears the rectum and renders it less sensitive to the douche that is next administered. A little salt or borax is added to the water, in the proportion of, say two ounces to the gallon for the first few douches, in cases of severe intestinal obstruction. Later a less quantity is added, and where the person takes the douche occasionally, say once a week for its constitutional effect, the salt may be altogether omitted, or a little good soap, castile or glycerine, only be dissolved in the water. In the treatment of infectious diseases, the germs of which have invaded the intestines, antiseptic solutions are advised, but they should be used with care, so that they shall do their work of destroying the microbes and cleansing the bowels, and not poison the patient.

As a rule hot or tepid water will be found best for the majority of people, since cold water is likely to produce severe *tormina* or griping. In their early experience of the douche some find it difficult to tolerate the griping caused by even hot water. This effect is due to the vigorous peristalsis set up by the water, and the action of the muscles being opposed or restrained by the dense deposit of waste and the inflowing current, painful sensations are felt. Each cleansing is followed by less and less discomfort, however, and if care be taken not to permit the refuse of digestion to accumulate and harden in the bowels, the treatment may be taken with ease and even comparative pleasure.

Mrs. B., a young lady who had been thought of consumptive tendencies, and not likely to live beyond 25, was persuaded to try the douche. I supplied her with a fountain syringe, which she used in a very skillful manner, and in time could take as much as four quarts of water and retain it five or six hours. Her health has improved greatly in all respects, and her prospect of mature womanhood and longevity appears to be at least equal to that of the average woman.

It is proper to say that this young lady was subject to feverish turns almost daily, and she found that by retaining so much water in the bowels the temperature of the body was reduced, and she was enabled to digest food and to sleep with a facility and comfort that had been almost unknown to her daily experience for years before adopting the treatment.

It should be remembered that water

that may indicate 105° to 110° in the basin or reservoir at the time of beginning the injection will lose eight or ten degrees in its passage through the small tube to the point of application, so that in sensitive cases which are to receive the treatment for the first time the water should be hot, not lukewarm merely. If a large open basin be used the temperature of the water will lower quite rapidly unless hot water be added at short intervals. The attendant should have a thermometer at hand to try the temperature so as to maintain it at about the same degree throughout the process. Dr. Monroe adds certain "precautions" that are appropriate as supplementing my own experience, for instance:

"The rectum should not be filled too full to start with, as it will produce urgent desire for the stool too soon, and the injection can not be completed satisfactorily. The treatment should be applied on an empty stomach, or nausea and vomiting will be apt to be induced. * * * My plan is to use about three quarts the first time, and gradually increase to the full capacity of the bowel. The first two injections may be given at intervals of three days, and about four succeeding ones at weekly intervals."

Two quarts of water are sufficient, I think, in ordinary cases of constipation, the fluid being held as long as possible for its solvent effect.

As a rule, the effect of the treatment, when indicated, is to improve the whole patient. The complexion seems to clear up, the weight increases, the intestines recover from their previous sluggishness and exhibit normal activity. The improvement in nutrition that ensues is fundamental to the improvement of the entire organization; the new energy of the body is reflected through the mind, which becomes brighter and more efficient. Depressed spirits, melancholy, irritation, give way to a cheerful tone, and fresh hopes encourage new effort in the arena of life.

What physician of experience does not know the change of disposition that may occur after relief of a congested liver or a protracted experience of indigestion? Mental disorder to the extent of excited outburst that are interpreted as insanity is not uncommon as a result of constipation. In the *Alienist and Neurologist* cases have been reported of this nature. One of the cases was that of a man with suicidal tendencies, who had refused food for a considerable length of time. He was restored to mental soundness after being relieved of an immense quantity of accumulated feeces. Another case was that of a young man who had become morose, suspicious and quarrelsome, He was treated in a similar manner and restored to health.

The good effect of the treatment is promoted in most cases by the drinking of cold or hot water, especially the latter, while the douches are being taken A glass of hot water half an hour before breakfast is potent to clear the stomach of adherent mucus and prepare it for the receiving of food, and it may be drank several times a day with benefit to the intestinal tract and to the blood.

H. S. D.

SURGICAL TREATMENT OF EPILEPSY; MOTOR CENTRES.

ONE of our subscribers in Kansas encloses a newspaper clipping, which states that a Philadelphia surgeon trephined a patient with epilepsy, whose spasms began in the thumb, and from there involved the rest of the body. The patient had had no attacks since the operation, which, we infer had been done recently, since the surgeon was not yet prepared to report it more fully.

Our correspondent expresses surprise at there being "centres," which could enable the surgeon to diagnosticate the seat of the lesion, and operate for its removal.

To write a reply which shall make the

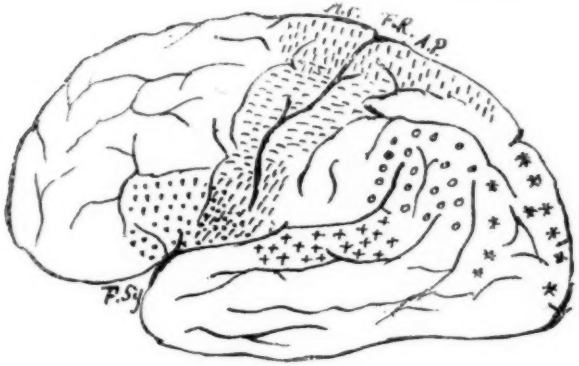
matter thoroughly intelligible to the general reader, would require more space probably than could be given in this number of the JOURNAL. But we shall endeavor to treat it at least candidly in this brief article.

Epilepsy has different divisions, according to the symptons rather than according to any known cause. Yet "traumatic epilepsy" is so called because the origin of the convulsion is in some injury, as a fall, a blow on the head, etc.

"Idiopathic epilepsy" includes cases without known cause, and up to recent times, at least, most cases fell under this head.

Other cases have also been operated upon by trephining, and sometimes brain substance, supposed to be the centre of irritation, has been excised, but Prof. Gray and others say they have not known a permanent cure result. The attacks may cease for a time, as they may, from a change of medicine, etc., but they invariably return after some days or months. It is not unlikely the Philadelphia case was of this nature, and the surgeon very wisely refused to publish it until some time had elapsed to determine whether there would not be a recurrence of the convulsion.

Regarding the motor or psycho-motor "centres," physiologists have experimented upon dogs and other animals, irritating or injuring the brain in different regions, with a view to determining the effect upon the muscles, or other bodily manifestations. Irritation of the cortex, under a portion of the parietal bone, on either side of the fissure of Rolando, causes certain muscle manifestations—in the leg, if the irritation be at the mesial line, of the arm, if somewhat down on the side and forward, of the face and head if still lower. Irritation of the same region in man, by injury or disease, sometimes produces a similar muscle manifestation, and has led in the



Motor and Sensory Centres (from Gowers.) F. Sy. fissure of Sylvius; F. R. fissure of Rolands; A. F. ascending frontal A. P. ascending parietal convolutions. MotorCentres indicated: ‖ leg; ⊤ arm; / face; \ tongue; : motor speech centre. Sensory region: + hearing; * half-vision region; o hypothetical crossed vision region

The cases suitable *par excellence* for operation are those of traumatic origin. In them some cerebral irritation, due to projecting bone at the seat of skull-fracture or other fact, is supposed to give rise to the convulsions, and consequently, the irritating cause should, if possible, be removed. If the case is a recent one, due to some blow upon the skull, the chances of permanent relief offered by trephining are fairly good, but if the attacks have lasted a considerable time the epileptic habit may continue, although depressed bone or other abnormal condition be removed.

case of epilepsy, now and then, to trephining upon the corresponding centre.

Thus far the chief significance of these motor centres has been diagnostic, throwing little light in the manner in which they have been studied upon the psychic function of the parts.

Perhaps an exception to this statement may ere long be made in relation to the centres for the different phases of language, and those qualities, like form, color, etc., of which a knowledge is gained largely through the sense of sight.

The time seems about come when neurologists and the more advanced members of the medical profession look in every direction for truth, casting aside past jealousies and prejudice, in order to aid and keep pace with the rapid progress of cerebral sciences. They may be a little slower, however, in helping the public to a knowledge of the facts, which they are likely to think should be of interest to, or can only be fairly understood by, the profession alone.

R.

SOME DIFFERENCES BETWEEN MEN AND WOMEN.

THE following are some of the differences in physical development between men and women, that appear to have a striking application. Most of them are explicable by difference in constitution, and the others by the very apparent difference in the conventional habits of the sexes. Very few young women can lift more than 200 pounds, and very few young men more than 400.

Very few young women measure more than 22 inches around the waist and very few young men less than that The difference in this respect between the sexes is considerable. Only a few lungs possess the capacity of a gallon. Most young men can inhale about seven eighths of a gallon, and the average young woman about three-fourths. Few young women have lungs whose capacity is a full gallon, and few young men six quarts, but the per cent. is not more than two or three. The difference in the weight of young women and young men is not as much as is generally supposed. There is a difference, but it is not more, on the average, than fifteen or twenty pounds.

Very few young men measure 40 inches around the chest, but the majority measure only 31 or 32, and in this respect the difference between the sexes is very little. Few strong young women measure less than 28 inches. These measurements have been taken when the air is entirely expelled from the lungs.

There is a very singular fact connected with the amount of expansion of the lungs and their capacity. One young lady measured around the chest, collapsed, 26 inches, and when expanded 29½ inches, yet the capacity of her lungs was only three quarts. A young man measured respectively 30 and 33 inches, and his lung capacity was only three quarts. The amount of expansion does not indicate the capacity of the lungs, nor is their capacity an indication of their health. An individual may have small lungs but very strong ones. Their size should be in proportion to the weight or stature.

I KNOW of no real occasion for intoxicants, either as a beverage or medicine, for the use of human beings. It is impossible for alcohol to afford any real strength—simply a temporary excitement, a dangerous agitation of the whole system, to be succeeded by a corresponding debility; such an excitement, such a stimulation, being simply a determined, a vigorous effort of nature to expel a foe as promptly as possible; every organ of the body, every membrane, every tissue and nerve rebelling against the presence of such a disorganizer within the vital domain.

DR. J. H. HANAFORD.

CONTENTMENT.

"I would not if I could repeat
A life which is still good and sweet;
I keep in age as in my prime,
A not uncheerful step with time,
And, grateful for all blessing sent,
I go the common way, content
To make no new experiment.
On easy terms with law and fate,
For what must be I calmly wait,
And trust the path I can not see,—
That God is good sufficeth me.
And when at last upon life's play
The curtain falls, I only pray
That hope may lose itself in truth,
And age in Heaven's immortal youth,
And all our loves and longing prove
The foretaste of diviner love!"—

Whittier.

APPLES CONSIDERED MEDICALLY.

CHEMICALLY the apple is composed of vegetable fiber, albumen, sugar, gum, chlorophyl, malic acid, gallic acid, lime, and much water. Furthermore, the German analysts say that the apple contains a larger percentage of phosphorus than any other fruit or vegetable. The phosphorus is admirably adapted for renewing the essential nervous matter, lecithin, of the brain and spinal chord. It is, perhaps, for the same reason, rudely understood that old Scandinavian traditions represent the apple as the food of the gods, who, when they felt themselves to be growing feeble and infirm, resorted to this fruit for renewing their powers of mind and body. Also, the acids of the apple are of signal use for men of sedentary habits, whose livers are sluggish in action, those acids serving to eliminate from the body noxious matters, which, if retained, would make the brain heavy and dull, or bring about jaundice or skin eruptions and other allied troubles. Some such an experience must have led to our custom of taking apple sauce with roast pork, rich goose, and like dishes. The malic acid of ripe apples, either raw or cooked, will neutralize any excess of chalky matter engendered by eating too much meat. It is also the fact that such fresh fruits as the apple, the pear and the plum, when taken ripe and without sugar, diminish acidity in the stomach rather than provoke it. Their vegetable sauces and juices are converted into alkaline carbonates, which tend to counteract acidity.—*Medical Age.*

FOOD AND HEALTH.

TO maintain a normal physical condition, the healthy action of all the organs of the body must be maintained. The healthy action of these in turn depends on perfect nutrition, while perfect nutrition is dependent on obedience to all of the organic laws.

The line should be drawn sharply between physiological action and pathological action; between nutrition and stimulation; between foods and poisons.

Vitality exerted in digestion, assimilation, and depuration, is physiological; when exerted in resistance to foreign or morbific causes and in the repairing of damages, the action may be called pathological.

Whatever may be digested and assimilated into bone, muscle, and nerve, is food and nutritious That which accelerates functional action, as alcoholic liquors, coffee, spices, and animal food, is, I think, stimulating and poisonous.

Man lives on air, water, and food. The lungs absorb oxygen from the air, which gives life to the blood.

Water is the only natural beverage, and whatever is added to it as flavor, is either food or poison.

Food does not act on the stomach, but the stomach acts on the food; neither do poisons, whether in the form of drugs or otherwise, act on the stomach, unless destructively, but the stomach acts on the poisons to expel them.

This is the law of vital resistance, which is as immutable as are the laws of chemistry or astronomy.

"The blood is the life," and is made of the food we eat. The quantity and quality of the blood depend on the quantity and quality of the food.

People sometimes complain of having too much blood, and the physician performs the operation of phlebotomy or blood-letting, when a more simple method of diminishing the quantity would be to lessen the amount of food.

It has been proven, to my satisfaction at least, that fruits and farinacea are the natural food of man; that animal food, owing to the incessant disorganization and reconstruction of tissue, contains excrementitious matter, which gives it its stimulating properties and tends to the abnormal activity of the propensities.

If liquors, tobacco, and flesh food could stimulate the moral organs to activity, there would be some foundation for an argument in their favor.

Under hygienic or water treatment, those patients who abstain wholly from the use of animal food, recover more rapidly, I believe, than those who occasionally indulge in flesh foods.

The normal activity of the organs of the brain is so intimately associated with the healthy functional action of all the organs of the body, that Phrenology and Hygiene ought to move forward hand in hand, "useless each without the other."

A. IDA ADLAND,
Class 1892, A.I.P.

"POSSESSED BY A DEVIL."

THE case related below is interesting because of its bearing on the phenomena of "double consciousness," or what is called in some circles "auto-hypnotism:"

A remarkable experience was related in the chapel of the University of New York by Dr. John L. Nevins, the celebrated missionary to China. He said that during the first twenty-five years of his residence in China he heard of several cases of demoniacal possession, but attached no importance to them, as he regarded them as merely cases of epilepsy which Chinese superstition had imputed to demoniac influence. In 1878, however, he was induced by a native Christian to visit a man said to be possessed by a devil. The man was a prosperous farmer but an ignorant man. He found him sane and rational but subject at intervals of about two weeks to curious paroxysms. He then spoke in a voice unlike his own, referred to himself not as "I" and "me" but as "he" and "him;" demanded that offerings should be made at a certain shrine, that incense be burned there, and acts of adoration performed. The man spoke with more culture than he ordinarily showed, and exhibited knowledge, especially of language, that he did not possess in his normal condition. Before these paroxysms the man was conscious that they were coming on and did his utmost to resist them. On his recovery he was unconscious of what he had said and done during the time they were upon him. He regained his own identity and consciousness with an effort, and was then very weak and bewildered for a time. Dr. Nevins was impressed with the similarity of the manifestations to the cases of demoniacal possession recorded in the New Testament, and noticed that the symptoms were not those of ordinary idiocy or epilepsy. He inquired about other cases and found them precisely like those he had observed. The man in his normal condition was convinced that the visitations were due to the possession of a demon, whose power he dreaded, but whom he was less able at every attack to resist. He was told that Christ was able to protect him and that by believing in Him he would be set free. He was afraid to trust Christ, and was sure that the only way to save himself from falling altogether under the power of the evil spirit was to do as he was bidden, and have his family appease the demon by sacrifices and in-

cense. Eventually, however, he was made to understand the cases recorded in the New Testament and to believe in Christ's power. Then he destroyed the shrine and ordered his family to refrain from the former method of appeasing the demon when he should be next attacked. When the premonitory symptoms appeared again, he gave himself up to prayer, calling on the name of Christ and beseeching him to save him from the demon. To his joy and surprise the attack passed off, and he did not lose consciousness or identity as at former times. His faith was strengthened, and from that time on, the attacks had yielded to the same means.

GEN. BENJAMIN F. BUTLER.

THE strangely turbulent career of this remarkable man is vividly recalled by the announcement of his sudden death. His head and face were of striking width in the region of the ears. The heavy jowls, the unmistakably Roman nose, and the boldness of the eye, all proclaim the restless ambition and almost virulent belligerence which marked every stage of his eventful life.

His temperament was exceptionally favorable, being a combination of the mental and vital which insured extraordinary fertility and strength of mind. His hands and feet were small, and having more blood and lymph than muscle or bone the most natural sphere for his activity was among the people. Human nature, the loves, hatreds, hopes, desires and passions of men were the materials upon and with which he preferred to work. Thus he was early attracted to legal, political and military life, especially as he needed opportunity for the free exercise of his pugnacity.

His social feelings were ardent, especially love of the opposite sex. If attacked, he believed in the "survival of the fittest," and that he would be the fittest.

Combativeness and Destructiveness were large, also Secretiveness. But his first impulse was to carry out his purposes by force. If craft or subterfuge could serve him, he certainly had no scruples about resorting to such means, and if the droop of the upper eyelids which to a considerable extent was natural to both his eyes) may be considered a reliable sign, he must have been an adept in all the arts of strategem and intrigue.

He had the independence of an eagle, but his eyrie was not built upon a mountain peak. He was essentially of the earth, earthy. And though he spread his wings to the coldest and fiercest winds, he was disposed to remain near the ground. Indeed, he seems to have been dominated by the desire for material prosperity, the pleasures of sense, and the kind of social and political power which would serve him upon the commercial plane.

Firmness and Self-esteem were especially strong, also the sense of property. There was not much elevation in the moral region, and the idea suggested by the head as a whole is that of selfishness. He seems to have lived almost solely in what the theosophists call the Kama-rupa, or body of desire.

There are indications of great executive intellectuality. He could accumulate, retain and apply knowledge with almost equal facility. From the diameter in the temples at Constructiveness, we can understand his ability to organize and manage. And in the phenomenal prominence of the eyes, taking into account his personal magnetism, we have the explanation of his well-known oratorical power.

Benjamin Franklin Butler was born in Deerfield, N. H., November 5, 1818, and doubtless inherited his military proclivities from his father, who had been a soldier.

The number and nature of his experiences made his life dramatic and picturesque in a singular degree. He was almost constantly before the public and the principal events which made him famous are well known. He died in Washington, January 11, 1893. B.

NOTES IN ANTHROPOLOGY.

Wisconsin Mound-Builders and Their Remains.—As the result of researches among the ruins of the mound-builders at Aztalan, Wis., Rev. A. N. Somers gives in the *Popular Science Monthly* his belief that these prehistoric people were cannibals, notwithstanding the fact noted that "their social life must have been highly developed to hold them together in one village, and to create such strong defenses as its walls indicate, and to carry their industries to so high a degree of perfection as is indicated by their relics." The author also says, "The government of so large a body of primitive people would call for an elaborate mythology to invest its rulers with the necessary civil power to hold the society together and wield its combined strength against its foes from behind the walls that protected its women and children, and to till the soil and make its wares. There was probably some division of labor among them; some making pots, others tilling the fields, while still others made tools of various sorts, and still others may have followed the chase for meat supplies. There seems, however, to be no doubt about their cannibalism. The human bones found were mingled with those of beasts, birds and fishes, and had been subject to the same treatment as those of the beasts—that is, they were all either broken into short pieces or split open. Had they been slain and eaten by their enemies, their bones would not have been so mingled and evenly distributed through eight feet of accumulating soil carried from the hills by a stream that only had water in it at extremely wet and short periods of the year, when the accumulation is not over three inches in a century; since the timber has all disappeared, and the plow has turned the soil every year for about forty years. That the flesh of those bodies was eaten, there can be no doubt, for no savage would go to the trouble to mutilate the dead bodies of friend or foe to the extent of separating all the joints with a knife, chopping the bones three or four inches long, and splitting all those and only those containing marrow. The diversity of the skeletons in texture and physiological configurations would suggest that the persons eaten were probably prisoners taken in battles, with possibly some of their own number eaten as a sacrifice in their festivals and orgies, of which they must have had many, as indicated by the temple-like structures that existed among the variety of structures built by them. Then, too, very wide differences of anatomical conformations exist between the bones in the garbage heap and those buried in the burial mound adjacent to their village. This confirms the notion that the victims eaten must have been taken by the chase or as prisoners of war. The bones indicate all ages from young children to aged men and women. There seems to have been no discrimination as to age or sex of the victim, as is generally the case when a human body is eaten in social or religious orgies. Whatever has led to cannibalism among those people, the habit seems to have been fixed so permanently in their lives that they relished human flesh. Probably hunger drove them to it at first, for they were populous, and their agriculture so primitive that returns were uncertain, as they were located where the winters were hard and long. Thus many facts seem to confirm the belief that cannibalism was practised among a people of a high order of barbarism."

Commercial Intercourse Between Europe and Asia in Prehistoric Times.—"The question of commercial intercourse between Europe and Asia in prehistoric times, is an interesting and much debated one. Among the relics of the Neolithic and Bronze Ages, we find implements of jade, a mineral which is found in China, but is not known to occur in Europe at the present time. There are also reasons for believing some of the bronze of that period to have originally come from India or China. On the other hand, it seems extremely doubtful if mankind was sufficiently advanced in

civilization at that time to have carried on a commercial system extending over so many thousand miles of territory, and necessitating the traversing of barren deserts and high mountain ranges; and many archeologists consider that the prehistoric European bronze was smelted and cast in the countries where it is found, and that the few specimens of jade were obtained from localities in Europe, at present either forgotten or exhausted, like the once noted tourmaline deposit at Paris, and Maine in this country. But until we know more of the social conditions prevailing in those early times, which might easily be more advanced than we now believe, the question must remain unsettled. In Africa, at the present time, ivory and other products of the country are brought from the interior to the coast by the uncivilized natives, over distances not much less than that between Europe and Asia. Whatever may have been the case in the Neolithic or Bronze Ages, it is certain that at a somewhat later date there was constant communication between the two continents; and a discovery recently made by M. Laponge at Gignac, in the south of France, confirms this belief. In a tomb of uncertain age, but containing Phœnician coins, he found a finely carved head of jade, the features of which are so distinctly Asiatic as to leave no doubt whatever of the country of its origin. This carving was found upon the breast of a male skeleton, interred in a grave roughly built of stone slabs. It was doubtless used as an amulet, as the marks of suspension were quite distinct. The head is that of a female of the dolichocephalic or long-headed type, and of a yellow race. The visage is distinctly of a modified Japanese type. The eyes are closed, and the expression is that of religious contemplation. There are apparently large pendants attached to the ears, but a more careful examination shows that they are he lobes of the ears themselves, enlarged and deformed after a manner common in the islands of the Pacific to this day. The hair is arranged in a complicated knot high up on the head, and apparently covered with a fine cloth. In front of this is worn a triangular object, apparently of some solid material; and the whole general appearance of the carving testifies unmistakably to its Asiatic, and probably Japanese origin. Many different opinions as to the origin of this remarkable object have been expressed. A native Japanese scholar thinks that it was carved in Japan, a little before the Christian era, after a Hindoo model of Buddha, while others attribute it to China or India. Whatever may have been its origin, M. Laponge believes it to have been brought to Europe and worn as an amulet by a chief of the Huns or Goths, who invaded the frontiers of China, about the time of the Christian era, and considers that the collection of graves among which it was found was an ancient Visigothic cemetery. Although this date would bring the carving down almost to modern historical times, it forms an important link between the ancient and modern eras, and in connection with other discoveries yet to be made, may add greatly to our knowledge of the social and political condition of Europe in those early times, from which no direct historical records have come down to us."—*Popular Science News.*

A Glimpse of Korean Life.—"Korean houses have walls of mud hardened like plaster. They have one story only, and are so low that the heads of the men walking in the streets reach almost to the roofs, which are thatched on peasant houses, and tiled in a quaint, crumpled way on those of the mandarins or upper classes. Those in which the poorer peasants live or exist, consist of two rooms. One is simply the ground roofed over; the other has a raised floor of brick, and is literally an oven. The fire is under it in a sort of furnace called a *khang*, heating the floor upon which all the family huddle at night, a wadded quilt serving as a bed. The man of the house takes many day-time rests there, while the wife waddles and potters around the larger inclosure cooking over a charcoal brazirr strange little cuts of meat and vegetables shredded into long thin strips, or washing the brass pans and bowls in which their food is always cooked and served.

Every house has its front wide open, with the interior exposed to the street.

The streets are narrow, unpaved, strewn and bordered with garbage Privacy and cleanliness do not enter at all into the village peasant's scheme of existence. However, he is amiable, kind to wife, children and beasts, hospitable to strangers in acts and manner, and although he is lazy, he is majestically so, with an air of soaring far above all trammels of decency and order. He lives in no more dirt than the Chinese, and in more comfort, in that he has warmth and better food. The Koreans are fond of outdoor amusements, such as archery and kite-flying. In their markets one would see large, round shallow baskets of rice upon the ground for inspection and sale; there are vendors of vegetables, bamboo-shoots, and a sort of turnip having the first rank in the native taste.

Pheasants hang about the stalls as common as chickens in an American market.

An objection to selling anything in large quantities is one of the unique business traits of the Koreans; their wholesale are much greater than their retail prices. They seem to fear that their stock may be exhausted, and they may have to exert or hurry themselves to replenish it. Korean peasant men dress entirely in white cotton, even in midwinter, though at that season they wear many wadded layers. The gowns are flowing and graceful, but far from clean, as it is only at the new year that they are changed. At that time the population is seized with a national fit of tidiness, and the clothes then are all clean or new. The old women usually wear white, the small children red, and the girls dress in short jackets of dark silk, with long straight skirts of pale green, pink or blue, gathered up on one side into a belt. The hair is brushed back from the face into a low coil held in place by one long silver pin. The girls paint their faces with a brilliant thick enamel, and while not pretty, they look so bright and happy, they almost redeem the streets from the repulsiveness of the dirty children and the haggishness of the married women."—*Chautauquan.*

Mulatto—Inbreeding and Physical Decay.—Fifty years ago and more it was the custom of wealthy planters, as they advanced toward age, to liberate such persons of their "estate" that bore to them filial relationship, and establish these in homes in localities where good treatment, consideration and respect due to citizens could be secured. Thus in Southern Ohio there grew up a community of mulattoes the offspring of men of wealth and position, who themselves represented the best New England stock. These pure mulattoes were tall, muscular, well-developed, complete types of physical perfection, many living to old age, sometimes to one hundred years. Proud of their parentage and light skin, they took for wives women who were also half white. Prosperity and pride held them aloof from the negroes. Their children intermarried, and their race continued until the fourth generation, when these families gradually became extinct. The offspring of the first cross were robust; those of the second, paler, more ash-like in complexion, slight in figure, evincing predisposition to and characteristics of tubercular disease; while in the second and third generations of pure mulatto intermixture all the children were girls and notably sterile. The fourth generation proved even less fertile, and presented cutaneous affections, ophthalmia, rachitis, hydrocephalus, hip and knee-joint disease and various glandular abnormalities.

These facts would seem to prove the affirmations of ethnologists that human hybridity can not be maintained without reversion or fresh supply from parent blood. Such a type can only have an ephemeral existence. In the second and third generations of pure mulatto blood, the offspring were inferior in vitality and intelligence and consequent morality. Their churches, independent school-houses, their very names in time disappeared. Some form of tuberculosis gradually undermined and extinguished them. The statement is made that when purity of race is maintained in civilized or barbarous countries, there is but little or no tuberculosis. And the dismal suggestion of ethnologists, cited by Broca, given in full, makes one pause or shudder—that the United States, where the Anglo-Saxon race is still predominant, but which is overrun by immigrants of various other races, is by that very circumstance threatened with decay, inasmuch as their continuous immigration may have the effect

of producing a hybrid race containing the germs of disease, degeneration and sterility.

Dr. W. A. Dixon, whose observations on the mulattoes are forcible remarks that it is wise as well as necessary to look beyond the bacillus for causes resulting in tuberculosis crime, idiocy and insanity. Purity of race is one safeguard against constitutional inferiority that brings with it lessened mental and moral vigor.—*Popular Science News.*

NEW YORK,
February, 1893.

HUMAN WELFARE A MORAL QUESTION.

A WRITER on social economics says in the *Popular Science Monthly*, at the close of a discussion of the causes of poverty:

"The attractive force that has drawn so many to study these social questions is human affection. I believe that the ground, and the only one, upon which permanent results can be built will be an ethical one. When every one is governed by his noblest impulses, in place of selfish instincts, poverty and misery will begin to disappear."

In this paragraph lies the key to social regeneration or true advancement. The economists are studying the problems of trade and of social antagonisms, endeavoring to find in material conditions, the statistics of commerce, industry, wage-earning, immigration, protection, free trade, etc., etc., the cause of those evils that vex the masses and incite so many of the poor and wretched to acts of violence and lawlessness. Theories are promulgated one after another, based upon differential views of such statistics, and they are more or less distinguished for ingenious suggestions for the betterment of society, but as a rule, the plans submitted have a fanciful or impracticable nature that commend them neither to the class that wields the power of money and place, nor to the class that complains of weakness, suppression and poverty.

Intellectual scheming with the bias of a favorite idea, to which statistics are made to conform as far as possible, can not resolve happily for both sides the questions that divide them. The *morale* of their relations must be considered—given the first place—otherwise a fair conclusion will not be reached. The interests of one side, humanely speaking, are not greater than those of the other, so that the law of kindness must prevail in the negotiations that look to their settlement, and this involves forbearance, concession, co-operation. But how are we to expect men to exhibit this spirit unless their natures are cultivated on the moral side, and the "selfish instincts" are controlled by those other instincts, that when active, normally incline one to consider the condition of others, and to feel that his own welfare is correlated to that of theirs? That "touch of nature" that "fellow feeling" that makes us "wondrous kind," needs to be brought out if the better time in the career of human existence, for which so many long, may be expected

to come. It is not intellect, it is not self-seeking, that will ever evolve it; but, these on the other hand, render society cold, covetous, unsympathetic, harsh, oppressive, unjust and revengeful —and, with qualities such as these man can never make the progress that should be his. The struggle, warfare, turbulence they provoke conduce to human degeneration, not to its elevation and nobility.

CEREBRAL TOPOGRAPHY.

A CORRESPONDENT puts this question:

"The division of the cerebral lobes into five by the physiologists (frontal, tempero sphenoidal, parietal, occipital and central), seems to be natural; inasmuch as we have five lengths to the body, five fingers and five toes, why not five lobes? And if there be five lobes, are we not bound to classify the organs in accordance?"

In reply we have to say that the division of the brain into lobes at different times and by different authors has been based on three facts, viz.: (1) the gross anatomical or mechanical appearance; (2) supposed function of different parts; (3) bone relation.

As to the first, or difference in outline, there is only one place at which bone intervenes between two portions of the cerebral cortex of one hemisphere, and even here it is not a break but only an indentation into the gray substance or, so to speak, a growing of this (with its related white fibres), around an obstacle. Naming the cerebral parts in their relation to this division, which in the brain is called, with its continuation, the fissure of Sylvius, it has been the custom to speak of a frontal, middle and posterior lobe.

The other irregularities in the convolutional outline of the cerebral hemisphere are not due to interpositions of bony substance, or of anything which has marked thickness, as the arachnoid and pia membranes and vessels.

In the skull the convolutions lie as closely together as the folds of a handkerchief ironed and put away. There is no break in the continuity of the gray matter covering the convolutions, for that of two which adjoin is continuous at their base.

Some of the dips or sinuses extend farther in than others, and are more uniformly present. They show plainly when the membranes have been removed and the brain is spread out. Some animals have no convolutions or irregularity of outline of the cortex, except that caused by the bone, and hence no further division into lobes based on the topography can be made. In those that have convolutions the number varies; they are much fewer in the monkey, for instance, than in man, but, comparatively speaking, those which are present in the monkey are more prominent and uniform in man than most others. Taking the principal sulci as their basis, including that of the fissure of Sylvius, divisions of the brain according to relative position have been made. But, as we have said, there is no absolute break of the cortex or organs between even the chief convolutions, and therefore, there can be no absolute division of the parts either anatomically or phrenologically, for the gray matter at the base of the convolution must have function as well as that on top. It is true, however, that in relation to certain normally constant convolutions, certain phrenological organs are anterior, posterior, superior or inferior, and may be localized in that way, just as they may be localized by taking the frontal sinus or occipital spine as the starting point. Indeed, the more such reliable starting points there are, the easier and more certain becomes phrenological localization on the exposed brain. Also, where a given organ occupies and is limited to the convexity of a particular convolution, it consti-

tutes a better landmark, not only for judging of its own development, but also for localizing its neighbors on the brain and skull. For instance, Spurzheim says of destructiveness that he could distinguish the organ in the brain removed from the skull by its peculiar form. But not all organs are limited to the convexity of a convolution, or even to a single convolution; much less is there a single convolutio n for each organ.

The division into regions or lobes has also been made from a physiological standpoint by phrenologists and experimentalists; but here again it has been largely relative and not absolute, and varied according to the idea which the writer wished to convey at the time. It is safe to say, for instance, that individuality is in the frontal lobe, veneration in the superior lobe, destructiveness in the middle lobe, or the perceptives are in the frontal, the moral in the coronal or superior, the social in the occipital region, while obviously it would be incorrect to speak of the perceptives as being in the temporal region, etc.

Again, lobes or regions have been spoken of with relation to the bones covering them; and while it might be proper to speak of cautiousness as being in the parietal region it would be quite improper to speak of approbativeness as being in the temporo-sphenoidal lobe.

We have seen that it is impossible to make absolute divisions of lobes based on topographical outline, and it is equally impossible, where phrenological organs border on one another, to draw the exact dividing line. Nor is it necessary. As in many other things up to a certain point we can speak of the absolute, beyond which we can only speak of the relative.

PEOPLE TO LIVE WITH.

In one of our exchanges we met with a paragraph unsigned that read like this:—"When you find a man with sense enough to ignore his own pride, to reason without getting into a passion; to contend for truth and principle, and not victory and vanity; who has patience enough to hear your side of the question as well as his own; and who has the charity to suppose that you are as sincere as himself, and have as much right and title to your opinions as he has to his, I say when you find a man of this stamp, there will be some benefit in your exchanging ideas. But to expect an impartial hearing and decision from a person wedded to a cause and his own pride, is to labor under a gigantic delusion! You will find that some men do not know the difference between ridicule and reason; between persons and principles—these will not accord you honor, and in the end their association will be to your loss."

There are such men in society as the above description details. They are few in number, but they are to be met with, and they furnish examples of the making of self, the result of a patient discipline that should be practiced by every one. We should be sorry indeed if our association with others furnished no instances of that orderly development of the faculties that signifies balance of the mental forces and power to control the instincts that tend to selfishness and passion. We should then despair of man's attaining his proper end, the full development of all his faculties and complete harmony and balance in their related action.

But there are men and women who have given time and thought to the quiet, earnest culture of their natures, and while we admire and love them for their patience, forbearance, and rational

intelligence, we little consider the trouble and discipline that culture has cost. Most of us probably think that their noble qualities are a gift of nature and beyond the acquirement of the ordinary mortal, whereas the fact is their endowments were really no better than the average, and their practical excellence is due to the fact that they early recognized their deficiencies and natural biases, and went seriously to work for their correction. It is their knowledge, through personal experience, of what in character may become offensive to self and others, that was fundamental to their upward growth. The people we like to live with are indeed a living reproach to us if we do not emulate their example and make ourselves desirable to those we call friends and associates.

A SUGGESTION TO THE CHICAGO UNIVERSITY.

THE new University of Chicago has already entered upon a career that promises to be that of prosperity. Over a thousand students are said to be enrolled so that the professors already have the encouragement of addressing fairly occupied benches. The success that has attended this educational undertaking illustrates what can be done by organization backed by a liberal cash endowment.

Chicago is enough of a city certainly to warrant the establishment within her borders of an institution upon a university foundation, and the rapid accomplishment of its organization shows how appreciative the Chicagoans are of an educational movement that will be likely to redound to their advantage in more respects than that of the financial, which many persons would have us believe is the interest to which Chicago is devoted body and soul. We suspect that this opinion is born of a commercial jealousy on the part of those who voice or approve it.

One point in the organization of this institution that deserves notice is the establishment of a chair of Anthropology—among the many departments that the system embraces—and the calling of a gentleman to that chair whose fitness is unquestionable and whose treatment of the subject is likely to be broad. As he has but entered upon the work there is much before him in the arrangement of a system of study and observation from which his students may obtain satisfactory results. We know his design is to examine man from several points of view, the normal as well as abnormal. We are not aware, however, of an intention to include in the physiological section the study of the mental constitution as it is formulated by the system of Gall and Spurzheim. May we not hope that this youngest of the American universities, with its promise of an early and robust maturity, will signalize its claim to progress by including a course in scientific phrenology? We are sure that it would be found of great interest to a large proportion of its students, men and women, and a feature, by reason of its immediate bearing on what is fundamental to true education, of special importance to all who would give to their studies the direction of personal utility.

The simplest explanation of nature's problems is most likely to be true. This applies especially to the doctrine of Gall.

Our Mentorial Bureau.

To Our Correspondents.

QUESTIONS OF "GENERAL INTEREST" ONLY WILL *be answered in this department. But one question at a time, and that clearly stated, must be propounded, if correspondents shall expect us to give them the benefit of an early consideration.*

ALWAYS *write your full name and address plainly. If you use a pseudonym or initials, write your full name and address also. Some correspondents forget to sign their names.*

WE CAN NOT UNDERTAKE TO RETURN UNAVAILABLE *contributions unless the necessary postage is provided by the writers.* IN ALL CASES, *persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage, or what is better, a prepaid envelope, with their full address. Personal and private matters addressed directly to the Editor will receive his early attention.*

HUSKY VOICE—S. A. J.—The trouble in this case is probably due immediately to laryngeal catarrh, of a Chinese nature. Or there may be a nervous insufficiency in the action of the vocal cords, for which certain habits may be responsible. In the writer's clinical experience special local treatment has been found usually beneficial for such cases, but the treatment could only be determined by a personal examination. A throat specialist or a physician who has made of throat diseases a careful study should be consulted. Do not think the pipe would be of much service as the trouble is not pulmonary, and if a strong man the patient has lung power enough—at present.

"ST. VITUS DANCE"—S. A. S.—St. Vitus Dance, or as the affection is known in medicine, Chorea, is a disease of the nerves, due to want of sufficient nourishment and rest. The children who exhibit this trouble are of excitable nervous constitution, and have not received that attention which is necessary to the proper maintenance of good physical health. Over pressure at school, indiscreet habits, insufficient sleep, faults of diet, being allowed to eat candies, cakes and trash to the neglect of substantial articles, and other things of an abnormal character, are usually at the bottom of the trouble. Consult a good physician and follow his advice. Generally the malady can be cured.

THE COMMERCIAL NOSE—M. O. C.—It is the breadth rather than the aquilinity o the nose which indicates trading talent; and this corresponds to the width of head in the typical merchant. However, the prominent bridge is a sign of aggressiveness which aids very greatly in driving a bargain.

OAT MEAL AND DYSPEPSIA—H. H. G.—We are not surprised that you find oat meal indigestible, for we have been consulted by a great many persons in regard to the same difficulty. But we have nearly always discovered that the trouble was due to imperfect cooking, or deficient insalivation. If you eat oatmeal that has been simply "warmed up" for ten or fifteen minutes, or take it "merely for the sake of the sugar and cream," as one of our lady patients admitted she did, very probably you will suffer.

FIRMNESS AND CONTINUITY—Col. T. W.—No, the office of Firmness is to keep the purpose fixed, while Continuity simply desires to fix the attention. Neither can do the work of the other, although they are naturally helpful. If Firmness be directed to a task requiring uninterrupted effort, it may compel the intellect to attend strictly to the one thing. But without Continuity, such work will be irksome, and in some cases exceedingly difficult.

LARGE AND SMALL FOREHEADS—J. Q. R.—Your observation that foreheads of very unequal size often evince equal intellectual power, is quite correct. But you seem to have lost sight of the fact that many large foreheads are expanded chiefly as a result of Mirthfulness, Ideality, Suavity and Tune, which faculties do not contribute to the intellect except in directing and adorning the thought. On the other hand, a forehead

may be comparatively small because devoted almost exclusively to the intellectual faculties, and yet manifest quite as much general intelligence as a large one of the class described above. The activity and intensity of intellectual organs depend, too, largely upon their depth.

What They Say.

Communications are invited on any topic of interest; the writer's personal views and facts from his experience bearing on our subjects being preferred.

Drinking at Meals.—In noticing an opinion on this subject published not very long ago, permit me to say that the great majority of people take too much fluid with their food. They either wash it down, half masticated, with water or some artificial drink, or slide it down with grease or syrup, instead of chewing it sufficiently to swallow in the natural way. The most healthful plan is not to drink at meal time; but if thirsty a small draught of cold water is not as injurious as hot drink. It is, however, just as essential to health to drink at regular intervals as it is to eat at stated periods, especially during hot weather. Drenching the stomach constantly and irregularly with cold water is a most prominent cause of diarrhœa in warm weather. The less people drink the less they will require. I have gone a whole week without drinking a particle of any liquid, and that, too, without the least inconvenience, and how much longer I might have abstained I know not. But if I should do as the world at large are constantly doing, viz: eating all manner of food calculated to create feverishness, I should doubtless be as unable to do without drink as they. My food is very mild, easy of digestion, and congenial to my nature.

Another prominent cause of the ill health of the masses is, they eat too many kinds of food at the same meal, mixing together in the stomach a heterogeneous mass of food, the chemical combination of which is incompatible and indigestible. Fruits and vegetables should not be eaten at the same meal, because the union of fruits and vegetables in the stomach and bowels produce gases which are poisonous to the system. If we would be healthy, we should never eat more than two kinds of vegetables at the same meal. MARTHA T. NEFF, M. D.

A Cordial Subscriber.—North Danville, N. H. DEAR JOURNAL.—I send you the fare for another year's travel to see me—for '93. I need not tell you that you are ever welcome, only that I have had your monthly visits for nearly thirty years. MRS. A. B. J.

A Frank Opinion.—In the December number of the PHRENOLOGICAL JOURNAL I note what you say under heading of Suggestions Wanted. I have been a reader of your journal for several years. I suppose that suggestions are what you want, and that you will then use your own judgment as to their practicability. About all I have to say is that I can not now remember of ever seeing anything in the JOURNAL that I could not approve. I have in mind at this time particularly an article in the November number on the desirability of using no deception in allaying the curiosity of a child in the matter of its birth, etc. I heartily approve your course in this matter. Both myself and wife have reason to regret that our parents failed, as we think, in telling us or teaching us things which we ought to have known. We have tried to keep the confidence of our children, and we do not believe that they are lacking in refinement or in morals from our course in these matters. I could write you more fully, but perhaps an idea is all you care for. In my opinion it will be difficult for you to improve the JOURNAL. If you lower the standard of typography for the sake of making the price lower, I should say that it would be a mistake. Further, I am very much inclined to the belief that the size is about right. If made too large your readers might lose interest. This is a busy world, and usually each member of a progressive family has his or her publication or trade journal to read, and when the secular and religious papers are included their leisure time is pretty wel occupied. L. S. L.

Belvidere, Ill.

Another Opinion on the "Easy Chair" Question.—EDITOR OF THE PHRENOLOGICAL JOURNAL: In your August JOURNAL Mrs. Homers, who has a lecture

on nursing, recommends that the sick room should contain only two chairs, "a very comfortable one for the nurse, and a very uncomfortable one for visitors who stay long."

I do not quite agree with this lady. I think the majority of nurses would forget their duties to their patient, had they a very easy chair. I have had nine years' experience, and I find little use for an easy chair.

As to visitors—I think people that require the services of a nurse are not in any condition to entertain. Yours truly,

MRS. K. M.

PERSONAL.

It is said that Count Tolstoi has at last been persuaded to settle his estates on his wife and children. In view of the tenacity with which he has advocated the doctrine that all land should be public property, this announcement will doubtless create much surprise.

Dr. Andrew Clark, the celebrated physician of London, stated in a recent address that what is called "moderate drinking" is potential in exciting gout, heart-disease, Bright's disease, and liver complaints, and that medical opinion is unanimous that there should be no drinking of alcohol in any form save at meals.

But is that not "moderate drinking" too, Doctor?

Of John Ruskin the painful news comes that his mind is so much impaired that he will not be able to do any more literary work. The symptoms of brain affection have been apparent for some years. This eclipse of an intellect that has commanded the admiration of the world of art and literature for so many years will be received everywhere with deep regret, and in the estimation of some observers add another son of Aenius to the record of insanity. It remains for the physiologist to learn the true cause.

PUBLICATIONS RECEIVED.

Civilization Civilized. By Stephen Maybell.

Adds one to the growing series of psycho-sociological books of the day. Mr. Maybell is a reformer of civil and economic methods of the most pronounced type. He opposes taxation, rent, etc., as inconsistent with a true civilization, believing, for instance, that everything in the trading or business relations of mankind should be based upon cost, actual cost, and so "when the purchaser paid for an article he would pay every real expense attending the thing *and that would be the end of it.*" Of course the principles he advocates are those of humanity, kindness, fraternal consideration, co-operation, mutual forbearance, etc., all of which, we agree with him, consist with a true civilization and so honor human nature. Published by Lovell, Gestefeld & Company. New York.

The Weight of the Body in its Relation to the Pathology and Treatment of the Club-foot. By A. E. Judson, M.D., Anthropædic Surgeon to New York Hospital. O. P. D.

This reprint discusses an important matter in the treatment of foot deformities, and properly advises the use of apparatus that will dispose of a child's weight in such a way as to prevent its influence with remedial effort. Illustrated with designs of apparatus useful to that end.

The Depths of Satan. A Solution of Spirit Mysteries. By William Ramsey. Edited with additions by H. L. Hastings.

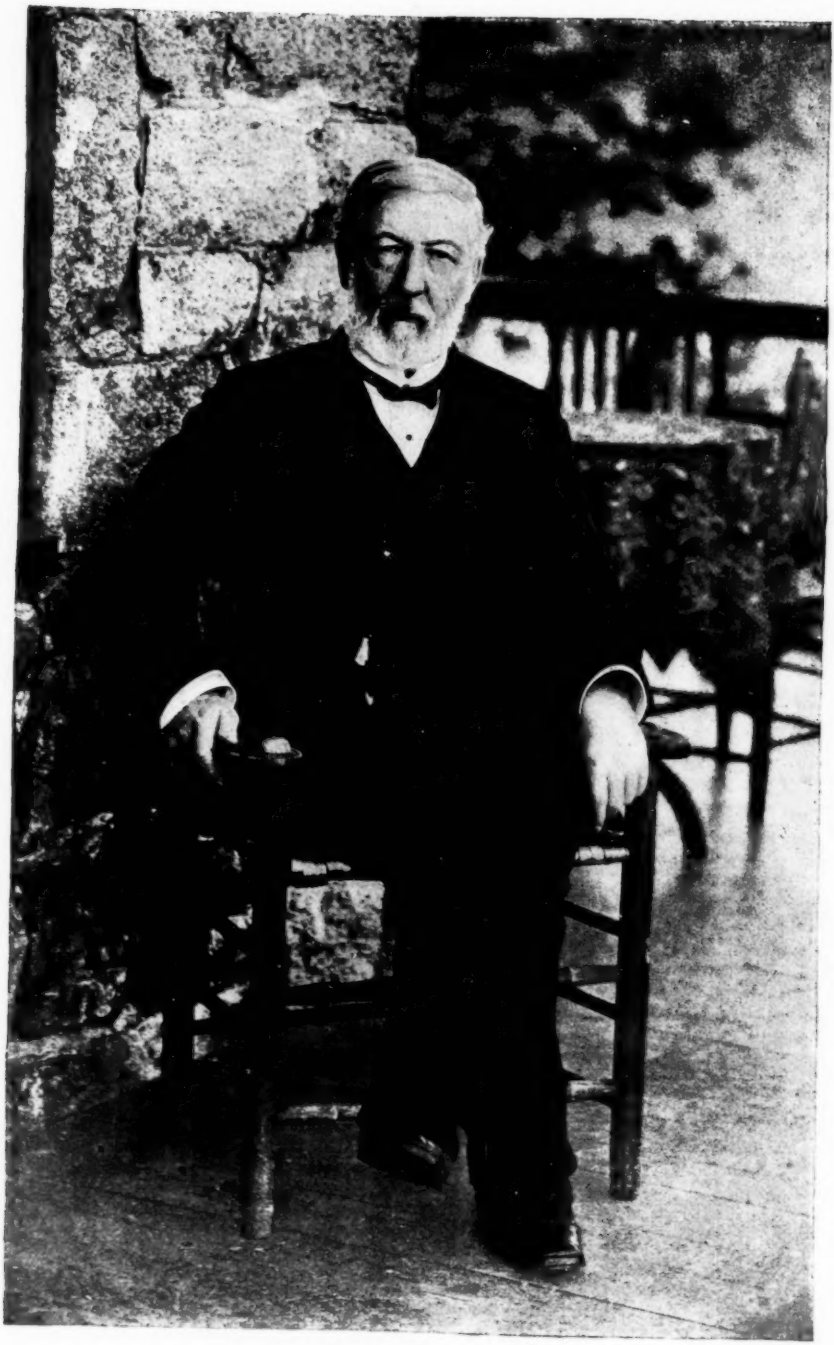
Spirit Workings in Various Lands and Ages. By same author, etc.

The Mystery Solved. Spiritual Manifestations Explained. Same author.

Familiar Spirits. Their Workings and Teachings. Same author.

Spirit Manifestations. Their Nature and Significance. Same author.

The foregoing titles represent as many pamphlets recently published by the Scriptural Tract Repository of Boston, Mass. Their "spirit" is adverse to spiritualism, characterizing that movement of the day, as one of the leading features of modern infidelity.



JAMES G. BLAINE. *From The Cosmopolitan.*